DOCUMENT RESUME

ED 178 515 SP 015 010

AUTHOR Klugman, Edgar; And Others
TITLE Too Many Pieces: A Study of Teacher Fragmentation in the Elementary School.
INSTITUTION Wheelock - Malden Teacher Corps Collaborative, Boston.
SPONS AGENCY Office of Education (DHEW), Washington, D.C. Teacher Corps.
PUB DATE Jul 79
NOTE 65p.

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Class Activities; *Class Attendance; *Class Management; Elementary Education; Elementary School Teachers; *Special Services; Teacher Administrator Relationship; *Teacher Attitudes; Teacher Morale; Teaching Load; *Time Blocks

ABSTRACT

Fragmentation of elementary school teachers' time and attention is an almost universal problem. Frequent coming and going of children to and from the classroom for legitimate purposes disrupts and distracts the teacher and other students. Children receiving special education services frequently leave the classroom for half-hour periods, thus missing a portion of instruction received by classmates. Administrative interruptions, too wide a span of ability in a single class, and lack of administrative support also create a sense of frustration for the teacher. The results of a comprehensive questionnaire on this topic are reported in this study. Suggestions are made for possible options for classroom teachers, support teachers, and administrators for improving this situation. (JD)

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TOO MANY PIECES: A STUDY OF TEACHER FRAGMENTATION IN THE ELEMENTARY SCHOOL

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July, 1979

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SP015010

The activity that is the subject of this report was supported in whole or in part by the U.S. Office of Education, Department of Health, Education and Welfare. However, the opinions expressed herein do not necessarily reflect the positions or policy of the U.S. Office of Education and no official endorsement by the U.S. Office of Education should be inferred.

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ACKNOWLEDGEMENTS

It is not possible to acknowledge individually the contributions of all the various persons who helped to bring this study to fruition. However, we would like to express our appreciation to William L. Smith, James Steffensen and Lois Weinberg from the National Teacher Corps, U.S. Office of Education, Washington, D.C. for their support of this project;

to the teachers in the three participating Malden, Massachusetts elementary schools, Daniels, Salemwood and Maplewood, who gave so generously of their time and without whose consultation the study would not have been possible;

to the Malden Study Committee who guided this project: Allan Zalk, the Assistant Superintendent of Schools in charge of Elementary Education; Pat Downing, John Maccario and Francis Walsh, principals of the respective schools sites, who gave freely of their time and helped us to clarify many of the issues; and Nicholas Cattogio, the President of the Malden Education Association;

to the Management Core Group of the Wheelock-Malden Teacher Corps Project, the Steering Committee and the parent group for their valuable suggestions;

to Cliff Baden, Director of Continuing Education at the College, for his support of the study, his readings of the manuscript and his many insightful comments and suggestions;

to Betsy Pattison, our student research assistant, who had primary responsibility for the literature search, and did major work with the interviews and classroom observations, and who participated most helpfully in our discussions and deliberations;

to the many people in the Boston, Brookline and Newton Public Schools who read and discussed the project with us and who helped us to shape the questionnaires and permitted us to test out our notions with them;

to Judy Sexton, administrative assistant, who nurtured us and guided us through arrangements concerning teachers and administrators, transcribed seemingly endless interviews and patiently retyped copy, and generally helped keep our collaborative investigators' group on target;

and to our respective spouses, who helped to reflect with us and supported us through this very enriching collaborative venture.

The three investigators take full responsibility for both the study findings and our interpretations of them. It is not often that three people working closely together for a period of one year can, at the completion of the project, state that they really enjoyed the experience and would, if given an opportunity, work jointly together again. But we would, and with pleasure!

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ABSTRACT

Too Many Pieces: A Study of Teacher Fragmentation in the Elementary School grew out of the Wheelock/Malden Teacher Corps Collaborative. It represents an attempt to better understand a phenomenon which teachers were increasingly experiencing, that is, a marked increase in feelings of fragmentation.

The study was conducted in three Malden public elementary schools.

The investigators used as their data base the results of a questionnaire filled out by teachers and specialists, classroom observations, a tally by teachers of the comings and goings of children in their classrooms, and interviews with teachers, administrators, and parents. Throughout, the major focus of the study remained the classroom teacher.

The term "fragmentation," as used by teachers, generally describes a feeling of frustration at their inability to do a complex job at a level which meets their own expectations. More specifically, it reflects a feeling of being pulled in different directions by administrative, legal, and curricular demands, and by the lack of coordination between the teachers' expectations as to how children will learn in their classrooms and externally imposed demands on teachers and children.

The major outcomes of the study were the following:

The one factor most significantly associated with teacher feelings of fragmentation was having children gone from their classrooms.

The more there were comings and goings for other learning activities, the more fragmented most teachers felt.

Teacher styles of response to internal and external interruptions were also related to feelings of fragmentation, notably differences in classroom management skills and emotional responsiveness to interruptions.

Communication patterns were related to feelings of fragmentation in several different ways. When teachers felt that they understood what the specialists were doing, they were more likely to perceive the specialists as being helpful. The process by which teachers learned about what specialists were doing also made a difference, with informal conversation appearing as particularly important. In addition, teachers who experienced a high degree of fragmentation reported significantly fewer sources of support than did their less fragmented counterparts.

Two other sources of fragmentation were teacher conceptions of curriculum and the need to plan for wide spans of ability.

Teachers' relative use of whole-class, small-group, and one-to-one instruction time in the classroom was not significantly related to feelings of fragmentation, nor was class size (within the limits of this sample) a significant variable.

Some policy recommendations are noted which are believed likely to have impact on several of the areas which induce teachers' feelings of fragmentation. In particular, it seems there is a pressing need to develop new ways to orchestrate and coordinate programs and services for children. Adding on new programs piece-meal, rather than within a systematic view of the classroom's or school's total ecology, is seen as creating new problems even as it helps solve old ones. In addition, the report includes some practical recommendations for teachers, administrators, and parents which may help with or even diminish some of the fragmentation found in elementary schools.

INTRODUCTION

The Wheelock-Malden Teacher Corps Project was funded for a two-year period beginning June, 1977, with the Daniels School in Malden, Massachusetts as the project site. In response to the wishes of Daniels' staff, the initial focus was on helping teachers deal with the hard-to-manage child and with improving children's self-esteem. Throughout the two-year period of the project, however, the faculty, the administration and the Teacher Corps staff together redefined the project's direction to also include school-wide communication, faculty-initiated problem-solving, parent involvement, and teacher inservice activities aimed at improving the quality of life in the classroom.

Another issue which became apparent very early was teachers' concern with something which they called "fragmentation." Wheelock College faculty had reported similar expressions of feelings of fragmentation by teachers with whom they worked in other schools. It seemed related to the multiplication of programs and services in the schools.

> "It appears that as a result of the many new program initiatives on the federal, state and local levels, a need for developing new ways to orchestrate and coordinate programs and services for children and families has emerged.
>
> Public Law 94-142 is a good illustration of how we assign new roles to schools and place added responsibilities on them. Our expectations seem to be that personnel, once trained, can successfully implement any new programs or rules assigned to them. However, what we should assess in each instance is whether the school personnel continue to carry the responsibility for 'old' programs as well as one or more new initiatives. We also need to evaluate the extent to which the new program initiatives alter the role and responsibilites of the teacher, the principal and other central office staff.
>
> It becomes increasingly clear that as our society reorders its program and service priorities for children and families, the role of school personnel has changed significantly. To what extent have the teacher, the principal and the central office staff been trained to assume their new roles? Has the role of the teacher been changed without adequate consideration of the new demands placed on him or her? Based on the limited sample of teachers with whom we have close, ongoing contact in our collaborative, we have found that many teachers express a feeling of great frustration because they are finding they do not have adequate control over their teaching day, in terms of content, priorities and schedule."[1]

A study was proposed to investigate the extent and nature of these feelings of fragmentation. The proposal was accepted and funded to begin in the fall of 1978.

With the strong support and help of the Assistant Superintendent in charge of Elementary Education in Malden, Allan Zalk, two schools were identified who were willing to participate in the study in addition to Daniels. They were the Maplewood School, Grades K-3, and the Salemwood School, Grades 4-6. (They were included in order to provide information on both similarities and differences between schools with multiple, and those with limited special services, and between the non-Title I and Title I schools.)[2]

The proposal was presented for approval at a school administration meeting in Malden in November, 1978. The meeting, chaired by Superintendent Paul Phaneuf, included Assistant Superintendent Allan Zalk; the Directors of Special Needs, Thomas F. McGrail and Marcia Weinberg; of Occupational Education, Paul Scagnelli; of Guidance, Deni Evangelista; of Music, Frederick J. Murray; of Secondary and Elementary School Physical Education, Joseph A. Rossino and David I. Walsh; of Art, Nunzio J. Luca; and the Title I Coordinator, Patricia Austin.

Following their acceptance of the study proposal, a Study Committee was invited to work with our research team in forming and carrying out a plan. The members of this Committee were the Assistant Superintendent (Allan Zalk), the principals of the three schools which were to participate (Patricia Downing

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[1]Wheelock-Malden Teacher Corps Collaborative *Continuation Proposal*, September 1978-June 1979; May 26, 1978, p. 13-14.

[2]The Daniels School is a Title I school, while the other two are not.

— Salemwood, John Maccario — Daniels, and Francis Walsh — Maplewood), and the President of the Malden Education Association (Nicholas Cattogio, who was also a teacher in the Daniels School).

From our preliminary conferences, consultations and meetings, it was decided to focus on the meaning and impact of fragmentation on teachers. It was the voiced frustration of the classroom teachers that had originally dramatized the growing concern of the staff over the issue of fragmentation.

As finally formulated, the study was to include the following:

1. Survey of the periodical literature
2. Demographic information about project schools
3. Preliminary interviews in other communities and in the three project schools
4. Design and administration of a written questionnaire
5. Statistical analysis of the data
6. Classroom observation
7. Report of preliminary findings
8. Follow-up interviews
9. Inservice and policy recommendations and offerings.

THE THREE PHASES OF THE STUDY

Our initial intention was to draw upon reports of research in the periodical literature, consultations with educators, a formal questionnaire, observations, and interviews, in order to develop a comprehensive "social photograph" of teachers' experiences regarding fragmentation.

In our survey of the periodical literature, we looked for articles dealing with all of the issues of mainstreaming and special services, i.e., Title I, programs for the handicapped and emotionally disturbed, and other ancillary services. We found numerous anecdotal accounts of teachers' experiences, advice on handling particular problems, and some research concerning teacher attitudes and program effects on children. However, we were unable to locate any research on our specific area of concern: the sources and correlates of teacher feelings of fragmentation.

So we began at the beginning and evolved a three-phase procedure for the systematic collection of data. The first phase involved constructing a questionnaire, pretesting it in three Boston-area communities other than Malden, and finally, administering it to a large sample of teachers and specialists in the three Malden schools.

The questionnaire had a double function. First, we wanted quantitative data bearing on a number of questions about possible causes and correlates of fragmentation. Second, since these questions seemed both tentative and incomplete, we looked to the questionnaires to provide us also with a wider understanding of fragmentation of a non-quantitative sort, along with further leads for study.

A second phase, carried on at the same time as the questionnaire design and administration, involved tallies of classroom size, observation of the coming and going of children from a sample of classrooms, and teacher documentation of the numbers and times of children's leaving for other educational programs. This step was intended to offer insight into the relation of some objective factors in the school day to feelings of fragmentation.

The last phase of the research involved interviews with a sample of teachers both from the three Malden schools and from schools in other nearby systems, and an interview with a group of current Daniels parents. These were designed to provide more precise information about, and elaboration of, issues and relationships uncovered by the first two phases.

PHASE I: THE QUESTIONNAIRE

This phase included three steps: pretesting the questionnaire, administering it, and then analyzing the results.

A. Pretesting

In approaching the design of a questionnaire, we began by considering a number of the possibilities suggested by the first year's experience of the Teacher Corps Project at the Daniels School, plus reading, observations, and consultations with many educators and our interviews in other communities. Chief among these was the question of the extent of feelings of fragmentation: are such feelings widespread, or had we been hearing from only a few vocal people? Next, we noted that insofar as there is fragmentation, teachers had indicated that it seemed related to the increase in state and federally mandated programs, particularly those providing special services for increasing numbers and categories of children.[1] Could we document such a relationship? In addition, there was a sense that other factors in the structure and culture of the schools might also be involved: communication patterns, the ways teachers managed their classrooms, and possible differences between teachers and specialists in their perceptions of their roles, of priorities, and of other aspects of school life.

More concretely, we began with these questions:

1. Is fragmentation a widespread phenomenon, or just the experience of a few teachers?
2. Is fragmentation related to teachers' philosophies of education, reflected in their relative use of whole-class instruction, small groups, or individualized, one-to-one work with students; and in the flexibility of their planning around children's comings and goings?
3. Is fragmentation related to the way teachers use their time, overall, during the school week?

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[1]Under Massachusetts Chapter 766 (mainstreaming special needs children) and Title I federally.

4. Is fragmentation related to the amount of special services children are receiving, especially as these involve taking children out of the classrooms?
5. Is fragmentation related to teachers' sense of responsibility for what the children are learning, and their sense of control and decision-making in areas of responsibility? How do differences in teachers' styles of relating to children fit in?
6. Is fragmentation related to the effectiveness or ineffectiveness of communication between teachers and specialists, and with other groups in the schools? Are teachers' and specialists' perceptions of their roles and of each other an important aspect of this problem?

Additionally, if any of these should turn out to be related to fragmentation, we wanted more information on the nature of the relationship: *how* are they related?

In the design of the questionnaire, we tried to pay special attention to issues of validity of response, especially with respect to the wording of the questions and the circumstances of its administration.[1] This meant several things: phrasing questions neutrally, so they did not suggest that we were looking for particular answers or would consider some answers better than others (thus: questions 4 and 5, suggesting that both positive and/or negative consequences were possible); offering brief introductory-transition statements to new sections (see the sentence before question 12); and offering a full range of possibilities for response, from "helps greatly" to "hinders greatly," and including "no opinion." The actual wordings were pretested with teachers from other schools, in order to check all these possibilities. While these goals and strategies may seem obvious, they were by no means automatically achieved. The possibilities for misunderstanding and even threat in the wording of questions were a real challenge, and the pretesting proved most useful.

B. Administration

In administering the questionnaire, the investigators secured the guidance and cooperation of the Study Committee. Participation of individual teachers in the study was voluntary. The questionnaire was distributed by the principals in the respective schools to those who had indicated that they would participate. Final figures were as follows:

Table I.

Total Number of Teachers and Specialists in Each School, and Numbers Filling Out the Fragmentation Questionnaire

School	Total Number of Teachers	Number Participating	Total Number of Specialists	Number Participating
Daniels	17	17	11	11
Maplewood	12	5	3*	2
Salemwood	12	12	6	6
TOTAL	41	34	20	19

*One specialist shared by Maplewood and Salemwood.

In all the sample comprised a total of 53 teachers and specialists.

C. Analysis of Results

Since the schools in the study did differ in the composition of the student bodies, in size, number of grades, and in the principals' styles, we had to ascertain that they were, nonetheless, similar enough so that data from all three could legitimately be pooled. We compared the respondents' answers to the questions which asked about the way teachers used their time and about the people they had dealings with (see Appendix A, questions 3, 9, and 10). There were no significant differences among respondents from the different schools for these questions. Additionally, the schools used the same Malden curricula and had similar organizational patterns. Thus, without saying that the schools are the same, there appeared to be enough basic similarity of schedules, structures and curriculum that we could combine the data from all three for our analysis of fragmentation.

What did the data reveal about fragmentation? Let us take in order the questions with which we began.

Is fragmentation widespread? The responses to question 17, "What degree of fragmentation do you personally experience in the course of an average school day?" indicated that 13 out of 53 respondents felt very fragmented, 26 felt moderately fragmented and 13 felt very little fragmentation.

[1]See Appendix A for a copy of the questionnaire administered to classroom teachers and Appendix B for the specialists' version.

Table II.

Degree of Fragmentation Experienced

	Very Little	Moderate	A Great Deal	No Answer	Totals	
Classroom Teachers:						
Daniels	2	9	6	—	17	34
Maplewood	—	5	—	—	5	
Salemwood	3	7	1	1	12	
Specialists: (all schools)						
Title I	5	—	1	—	6	19
Learning Center[1]	1	2	—	—	3	
Resource Room[1]	2	2	5	—	9	
Speech	—	1	—	—	1	
TOTALS	13	26	13	1		53

Overall, the data show that feelings of fragmentation are widespread, with half of the respondents reporting moderately fragmented feelings and another quarter strong feelings of fragmentation. So the first question received a positive answer.

A closer look at the figures also shows that the feelings of fragmentation are not evenly divided between the schools, nor between the types of specialists. In particular, the Daniels School, which has more children receiving special services (under Chapter 766 and Title I) and which is a larger school, has the highest proportion of teachers reporting high feelings of fragmentation. And among the specialists, fully 55% of the resource room teachers report these feelings compared to only 16% of the Title I teachers, and none of the other specialist categories. We will discuss the meaning of these differences between schools in the section on policy recommendations; the Resource Room situation is addressed in Appendix H.

We then looked at areas which might be correlated with these feelings of fragmentation. We hoped to be able to see whether patterns would emerge which would help explain the sources of these feelings.[2]

There were a number of surprises in the findings.

We had thought we might find a relationship between *teachers' philosophies of education* in terms of whether they chose to spend more teaching time in full class instruction, small group instruction, or one-to-one instruction, and how fragmented they felt, but that did *not* seem to be the case. None of these showed significant association with feelings of fragmentation. Nor did *overall patterns of use of time* correlate with feelings of fragmentation. So in light of the data, these first two questions were answered in the negative, and they were not pursued further.

However, the three sets of questions concerning *movement patterns, teacher issues of control, decision-making and responsibility,* and *communication patterns* in the schools did yield interesting answers.

In particular, the statistical analysis showed one factor that was associated significantly and strongly with teachers' and specialists' feelings of fragmentation. It was amounts of time spent with their children. Specifically, the more time the teachers have all or ⅓ of the children together in their class, the less fragmented they report feeling.

Table III.

Fragmentation and Time With One's Class Together

Degree of Fragmentation Experienced	Time with ⅓ of the Children Together		
	3-6 hrs./wk.	6-12 hrs./wk.	more than 12 hrs.
Very little	—	—	6
Moderate	1	2	17
A great deal (no answer, 1)	1	3	3
TOTALS	2	5	36

A similar relationship appeared with respect to amount of time with all of the children together and teacher feelings of fragmentation. What this indicates is that of all aspects of school life that were analyzed statistically in the questionnaire, the one thing that related significantly to teacher feelings of fragmentation was the absence of groups of children from their classrooms.

A second factor, having to do with the teacher's *sense of responsibility for the children's work,* also appeared. Of those who reported feeling fragmentation and wrote comments on the question, 8 out of 10 seemed to feel that children missed something by leaving the classroom. Conversely, teachers who felt very little fragmentation and who made comments did not feel that missing classroom time was a problem. In a variety of ways, they handled the issue differently. Of the specialists who commented, no one mentioned this as a problem.

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[1]See Appendix H for definition of these terms.

[2]Teachers and specialists were separated and tests of significance (Chi square) were run on the teachers' responses. Statistical data are presented in Appendix G.

Taken together, these two findings point to some questions concerning whether the present system, of having specialists who provide special services to children outside of their classrooms, may not need some rethinking. This point will be addressed again later.

With respect to the entire area of *communication* between teachers and specialists, there were several interesting outcomes.

We found a number of factors related to whether or not the classroom teachers found the specialists helpful. Teachers who have more time to spend with at least ⅓ of the children in their classes see the specialists as more helpful to the children and more helpful to the teachers. (Conversely, the less time they had with their children, the less they perceived the specialists as helpful.)

The more the teachers felt they understood what it was the specialists were doing, the more they saw the specialists as being helpful both to the children and to teachers. The reverse of that was also true: the less they felt they understood what the specialists were doing, the less helpful they found them.

The other variable that was related to whether or not teachers saw the specialists as helpful to children and to teachers involved the way they found out about the specialists' work.

Here, if they found out by informal conversations with specialists (as opposed to by the grapevine, by staff meetings, or by conferences), they saw the specialists as more helpful.[1]

The way teachers and specialists communicate has clear implications both for the amount of information teachers receive and for whether or not teachers see the specialists as helpful. The relationship of these communication processes to the teachers' feelings of fragmentation is less clear. Cross tabulation did not indicate a significant relationship between how well teachers understand specialists and how much fragmentation the teachers experience, although the trends were in the correct direction. (As was stated earlier, the one variable that stood out in relation to teachers' feelings of being fragmented was whether or not they had substantial amounts of time with at least ⅓ of their class.)

PHASE II: CLASS SIZE, COMING-AND-GOING, AND FRAGMENTATION

The questionnaire data told us, then, that time with most or all of the children present was important to the teachers. It could not give us a picture of the actual impact on the classroom of children coming and going, nor what the issues were for the teacher when children were in and out of the classroom.

So we asked each teacher in the study to fill out a time schedule for a week, showing who went where and when.[2] Usable data was obtained from 29 teachers. In addition, we selected eight classrooms in the three schools in which we spent a full day charting these comings and goings and destinations of children, to see who went where and for how long, and to get a firsthand sense of what happened as children moved in and out of their classes.[3] We also collected tallies of class sizes and began the analysis of this phase by relating class size to the teachers' feelings of fragmentation.

A common refrain of teachers everywhere is that smaller class sizes will make everything better. The data, however, indicate no significant relationship between feelings of fragmentation and class size in these three schools. As Table IV indicates, the mean and median sizes of the classes of teachers who felt little or no fragmentation, moderate amounts of fragmentation, and high fragmentation were virtually indistinguishable, and the ranges of class size are also alike.

Table IV.

Overall Class Size and Fragmentation

Teacher's Self Description	N	Range of Class Size	Mean Class Size	Median Class Size
Very little fragmentation	(6)	19-28	22.4	22
Moderate fragmentation	(15)	15-30	22.6	23
A great deal of fragmentation	(8)	18-29	22.0	23

Another way of summarizing this finding is to note the following breakdown:

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[1]See p. 15-16.

[2]See Appendix C

[3]The classrooms were selected on the basis of grade level representation, rather than on the basis of reported fragmentation. We chose one grade at random from each of grades 1-6, plus two resource rooms. As it turned out, all levels of fragmentation were included, with two reporting "little," three "moderate," and two "a great deal."

Table V.

Three Different Class Sizes and Feelings of Fragmentation

Size of Class	Number of teachers rating their their fragmentation experience as: Very Little	Moderate	A Great Deal
under 20	2	5	2
20-25	3	3	4
over 25	1	5	2
TOTALS	6	15	8

What this table shows is that in all three categories of size there are teachers who feel little, moderate and a great deal of fragmentation. That is, smaller class size does not seem, on its own, to be a panacea for fragmentation. (We should note that "smaller" here means a class size of 15 to 19, and "larger" means classes of 26 to 30.) We know that smaller class size makes *many* things better,[1] but with respect to these schools, our data show that fragmentation is not one of them.

There was, however, another set of factors in the schools' organization which *was* related to feelings of fragmentation.

We took the time schedules and added up all the comings and goings for instructional purposes for each room. Next, we divided the classrooms[2] into three groups, depending on whether their teachers indicated little, moderate or great feelings of fragmentation, and compared the numbers of comings and goings for each group. Some obvious patterns emerged, which are clearest when represented in a visual display (Chart 1).

What we see here is that the entire group of teachers who feel a great deal of fragmentation have, with only one exception, more children's comings and goings than the entire group of moderately fragmented teachers, save one. With only one exception per group, there is *no overlap*.

The third group of teachers, those who describe themselves as feeling only a low degree of fragmentation, do not fit this pattern. They include the entire spectrum of amount of movement, from less than ten to almost 80 comings and goings in one week! We can only speculate that another set of factors — perhaps some of those revealed in the follow-up interview to be discussed shortly — predisposes some teachers to react with feelings of fragmentation, while others remain relatively immune to the feelings. Then, for teachers who react by feeling fragmented, the amount of fragmentation felt is in direct proportion to the amount of movement of students in and out of the classroom. Increase the numbers of comings and goings, and one consequence is that feelings of fragmentation also increase.

The firsthand observation of the children's movement in and out of classrooms gave us more insight into some of the meaning of these events in the lives

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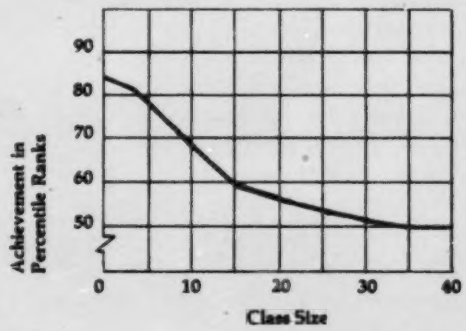
[1] "A large-scale review of research shows that students tend to learn more in smaller classes and that their chances improve rapidly as class size drops below 15. The findings by Gene Glass and Mary Lou Smith of the University of Colorado* are important because most previous reviews have failed to find a relationship with student achievement.

Glass and Smith used modern statistical techniques to equate nearly 80 studies involving more than 900,000 pupils. Embedded in the studies were more than 1,000 instances of comparisons of achievement of students in large and small classes. These were converted to a common scale and then translated into percentile ranks.

In larger classes, a few students more or less made relatively little difference. But the smaller the class, the greater the advantage of having fewer students (see chart)."

**Meta-Analysis of Research on the Relationship of Class Size and Achievement*, Far West Laboratory for Educational Research and Development, 1855 Folsom St., San Francisco, CA 94103.



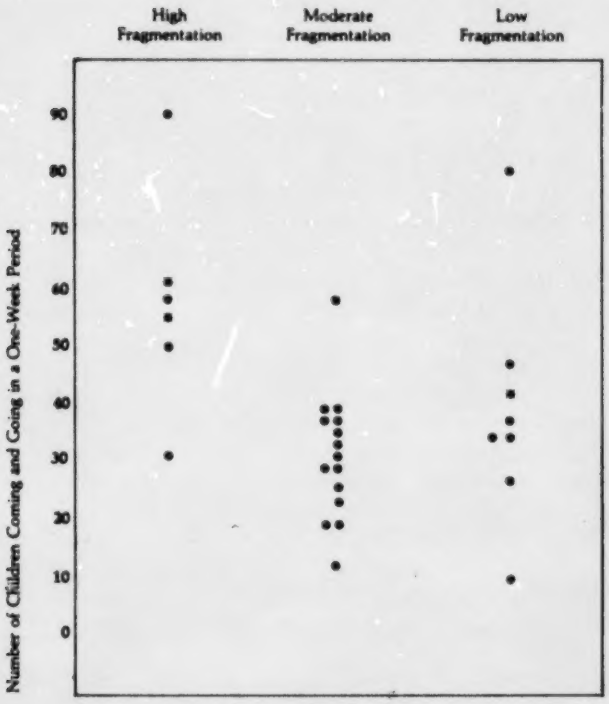
Relationship between achievement and class size (data integrated across approximately 100 comparisons from studies exercising good experimental control).

From Gene V. Glass. "Class Size and Learning" *Today's Education* 68:42-44. April-May, 1979. Washington, D.C. National Education Association.

[2] None of the specialists was included in this task.

Chart I

Comings and Goings at Each Level of Fragmentation, by Classrooms



Each mark represents one classroom at that level of comings and goings.

Mean =	54.8	35.3	40.4
S.D. =	13.1	6.99	13.6

of the children and their teachers. The observers charted the comings and goings, plus other extraneous events, and also noted the teachers' behaviors at those times and the effects on classroom climate. These, in turn, were compared to teachers' self-reports of degree of fragmentation felt. What became clear was that the task of the teachers was not just the monitoring of the comings and goings of the children (which they had perceived to be a problem), but also the management of all the interruptions in their day, of which comings and goings of children were just a part. Furthermore, teachers evidenced a variety of differing reactions to these events, which seemed connected to the degree of fragmentation they had experienced. We decided that we needed to know more about interruptions as a source of fragmentation, and about teacher styles of response, as well.

PHASE III: THE FOLLOW-UP INTERVIEW

These initial questionnaire findings and observations were presented as a preliminary written report to the Study Group and to the teachers from Daniels School for discussion and reaction.[1] We looked at what the findings told us, what they didn't tell us and what we still wanted to know. Further information was needed if we were more clearly to understand fragmentation, its sources, and how it was experienced.

To accomplish this aim, we designed a follow-up interview questionnaire and selected 19 teachers as respondents. Thirteen of these were participants in the Malden study and were representative of the three levels of fragmentation. Of the 19, four were resource room teachers and one was a Learning Disabilities specialist. As a pre-test subgroup, six other teachers from other school communities were selected by research team members. The reactions of these six teachers were included in the final analysis because it seemed clear to us from the similarity of their responses that the issues of fragmentation were more general than specific.

In addition, an interview and conversation was conducted with a group of current and former Daniels school parents. The purpose was to find out their perceptions of several things: the impact of special services, as currently structured, on their children and on themselves; their children's reactions to missing class time; what might be of help to them as parents; and their recommendations for possible changes.[2]

The follow-up interviews did help us to define fragmentation and to focus on what seemed to be some of the basic issues that affect the degree of fragmentation experienced by teachers. Other themes appeared as we analyzed teacher comments. Together they pointed to four main sources of fragmentation: interruptions of all kinds, too wide an ability group to plan for, lack of felt support, and teachers' conceptions of curriculum.

Definition of Fragmentation

It became apparent that fragmentation is a complex phenomenon and that the term has different meanings for different people. The interviews indicated that teachers were using the term to describe

[1]The teachers from the other two schools did not attend a meeting, but were contacted informally.

[2]See Appendix E for questions asked in the follow up teacher interviews, and Appendix F for questions asked in parent interviews.

something they experienced. Generally, it described a feeling of frustration at their inability to do a complex job at a level which met their own expectations. More specifically, it reflected a feeling of being pulled in different directions by administrative, legal, and curricular demands, and by the lack of coordination between the teachers' expectations as to how children will learn in their classrooms and externally imposed demands on teachers and children. The high frequency of coming and going of children, a clear source of teachers' feelings of fragmentation, is symptomatic of the lack of coordination.

We were able to clarify how fragmentation is experienced. We found that all the teachers in the study experienced fragmentation to some degree, although there were teachers in the interview situation who had difficulty identifying it at the feeling level. Highly fragmented teachers experienced it daily. Moderately fragmented teachers experienced it one or two days a week, which tended to correspond to days when there was a lot of coming and going — "Wednesday is very hectic." Teachers who experienced little fragmentation found it was a matter of certain times of year. They did experience interruptions at other times as well, but did not see them as problems.

In addition, we found that the majority of teachers defined fragmentation as "the breaking up of the learning process in the classroom; the breaking up of the child's day of instruction"; and whatever interferes with "the flow and continuity of the program"; in short, fragmentation came from interruptions which were disruptive.

Let us turn to the interviewees' own words for illustrations, as we discuss each of the four sources of fragmentation which the interviews revealed.

Interruptions of All Kinds

Teachers differentiated between external and internal types of interruptions.

A. External Interruptions

Major interruptions stem from children coming and going to the special needs programs, to other classrooms, and to ancillary programs,[1] and the consequences of that for the children and teachers.

1. Programmatic interruptions

> "Fragmentation is . . . monitoring the comings and goings of the children and planning for all the class time when I need to have all the children there."

It does not seem to be the comings and goings of just any sort that are the problem. In most classrooms there was a regular flow of children coming and going to the bathroom, to run errands, etc. These are all brief trips. If we listen to the teachers, it is the consequences of the coming and going for *blocks of time* that are the problem, that create the fragmented feeling.

Children leave the classroom for half-hour blocks of time and return according to schedules which are either at odds with classroom schedules or around which classroom schedules become fixed. In many cases, this interferes with the continuity of life in the classroom.

> "Fragmentation is that part of the day when I don't have the children together so I can't teach the class as a whole."

One result is pressure on teachers and children. There is pressure on teachers to see that work is completed and basic skills covered:

> "I feel frustrated. You're all ready to do something and then six children go out — probably the same six who need the attention most."

> "When the children miss class time, I have to try to catch students up on material missed. The time I spend on that causes the rest of the class to miss something else."

There is pressure on the children to make up the classroom work they miss:

> "The real problem is making up the class time they (the children) miss. The teacher has to struggle with makeup. It's a real problem for kids who have to add a half-hour to their day. Title I kids are low in motivation, forget directions, etc. and therefore more teacher energy is required to get things done, to remind them."

Parents are aware of what happens to the children in a different way.

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[1] In government bulletins, auxiliary services means all those activities which are "non-academic" and not traditionally included in the function of the school such as parent involvement, counselling, bus service, health care, food, etc. In some school systems auxiliary is used to mean "non-academic" learning activities such as art, music, and physical education.

In this report, we follow the usage in the Malden Schools, where the term "ancillary" refers to music, art and physical education, and "special services" includes speech therapy, occupational education, remedial reading and mathematics, Learning Centers, Resource Rooms for children with special needs, and special programs such as Title I, Chapter 766, and bilingual education.

"I had to schedule from six to bedtime the other day in order to help my youngster make up all of the work. She was unable to complete it and we began work early in the morning."

Feelings of pressure and frustration on the part of the teacher and children are triggered by the breaking up of the continuity of time in the classroom and time missed. These pressures exist at all grade levels.

Among the comments from the interviews that tended to support our impression that "interruptions of all kinds" are a primary source of fragmentation, were the frequent references to the way the broken-up quality of the scheduling frequently prevents children from becoming really engaged in their work.

"When children are able to do their own things without too much interruption, this tends to lead toward nonfragmentation while when children know that they have to leave for Title I, speech, math five minutes hence they do not tend to involve themselves in the activity . . . and then I feel fragmented."

"Kids suffer from disruptions and short time blocks."

"A child loses complete continuity of the program. It also permits the child to avoid activities that may be going on just prior to the time the special needs activity occurs . . . the children do not invest as much of themselves because they are taken away at different times during the day."

While most teachers expressed concern for the variety of problems the special needs programs and special services created, they still approved of the programs' attempts to meet the children's special needs.

"On the other hand, it's a good feeling knowing that the students leaving the room are receiving individual help I wouldn't have the time or training to give."

Another form of interruption that is disruptive and affects teachers and children was expressed by a sixth grade teacher who teaches in a system where, in preparation for junior high school, beginning with the fourth grade, children change classes for the last two periods in the morning. Fourth, fifth and sixth graders who are in the classroom-change sequence and special needs programs must sometimes deal with six different teachers a day.[1]

The ancillary programs were also mentioned as disruptive to classroom continuity:

"I find that when children go out of the classroom or the whole class goes off to something, like music, it interferes with the flow and integration in the classroom. Following something like music there's a lot of energy expended to put the class back together again."

"I feel less fragmented on Thursday when there are no breaks such as art or music."

"These last two weeks . . . we have swimming at 10:30 and it seems to take care of the day. They're high and little gets accomplished after that. Tomorrow after we come back from swimming, we have art and music. I feel extremely frustrated . . . unable to get everything done that I would like us to accomplish."

In schools where Title I is added to other ancillary and special services the coming and going of children may often seem like an exercise in perpetual motion.

2. Administrative interruptions

School administrative business is another source of external interruption. It is so much a part of each day that teachers hardly count it. Only when the study team observers recorded it was it clear how often the teacher's attention was diverted by the public address system, delivery of school notices and messages, and people stopping at the door to confer.

"It's a nuisance. You have to sign notices when they come in."

"Stop and really listen to P.A. and then go on . . ."

"People who come into the room have priority and kids know this."

The appearance of the school maintenance team seemed especially arbitrary.

"We had plumbers all morning who were oblivious to what was going on in the classroom."

"They came to spray paint the ceiling, and you can imagine what that did to cookie making."

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[1]An interesting perspective on this point was offered by Dr. Thomas Frank, former Psychiatric Consultant for the Boston Public Schools, who emphasized in an interview regarding the issue of relationships and developmental needs of children, "children need in-depth relationships with a few people . . . it is more difficult for the teacher to relate to a child who is in and out a lot."

B. Internal interruptions

For all teachers, there are also interruptions within the classroom that have to do with meeting children's needs.

> "Interruptions are a fact of life and you deal with them as they come up. Children have bloody noses. Someone needs immediate attention for something. These are all interruptions."

However, differences in teacher style were apparent in the way teachers reacted to internal interruptions.

> "When children demand attention I have the rule they must raise their hands. Then I tend to respond by stopping what I'm doing, interrupting the reading group and dealing with it. Sometimes there are too many raised hands."

> "One thing I've noticed this year is that children will come up just to get affection. They need a hug and they get it. It's silent communication and doesn't interrupt anything."

> "The thing I find hardest to deal with is a noisy classroom." (This teacher runs a very quiet classroom.)

> "The general atmosphere of the room is one of child activity and interruptions and shifts of activity are part of the fabric of the day. However, interruptions with 24 children can be a real problem."

There seem to be two separate factors at work here. One concerns the emotional responsiveness of teachers, which the observers noted in the course of monitoring class activity. Being too responsive was stated as a definite problem by two teachers interviewed. They expressed the view that those times when they experienced the greatest degree of fragmentation were times when

> "I have to make too many responses to too many people . . . when I experience my need to keep everyone happy."

> "The times when I do feel fragmented are those times when too many kids need me at once . . . those periods of being too available and too responsive."

It is possible that many teachers who experience a high degree of fragmentation are unaware that they make themselves too available and do not set clear limits for the children and themselves. Being aware of one's own needs (as well as the needs of others) and finding alternative ways to see that they are met may well be important attributes of those teachers who experience a low degree of fragmentation.

The second factor relating to differences in teachers' reactions to interruptions is what Jacob Kounin has termed "withitness."[1] This is a set of classroom management skills involving the ability to attend to more than one event or task at a time.

A teacher who manages to handle interruptions in ways that are not disruptive to her or to the children consequently experiences a low degree of fragmentation and creates a smoother learning environment.

> "I used to feel frustrated by all the interruptions until I decided that my attitude determined what was an interruption."

> "Interruptions are a fact of life and you deal with them right away."

> "Sometimes interruptions can force a change in focus and it is good to look at how to cope with these."

A teacher at ease in an active classroom communicates a different message to children than does a teacher who would feel fragmented by a "noisy classroom."

Although teachers differentiated between external and internal types of interruptions, the classroom observation revealed that their way of managing, their style of response, was often similar for both types. And some styles, in turn, were related to feelings of fragmentation. That is, teachers whose behavior demonstrated high emotional responsiveness, and less "withitness" skill, tended to feel more fragmented as a result of interruptions.

These results parallel and clarify the questionnaire findings reported earlier of the relationship between teachers' feelings of fragmentation and the amount of time they had with all or ⅔ of their class. Taken together, the findings suggest that significant numbers of teachers find it an impediment to their teaching to have children leaving the classroom in any significant numbers, with teacher style of response to interruptions as a significant variable mediating these effects.

How about the effects on the children? Comments from teachers underscored our sense that feelings of

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[1] *Discipline and Group Management in Classrooms*, Jacob S. Kounin. Holt, Rinehart and Winston, Inc., 1970, Chapter 4, pp. 74-91.

fragmentation are communicated from teachers to children:

> "I feel frustrated. I feel that I am not dealing well with individual children and that I don't have enough time to communicate with children about what they're doing . . . feelings of frustration result in feelings of fragmentation for both the children and me."

The reverse is also true:

> "The lack of motivation and the lack of interest on the part of the children made them act fragmented which makes me act fragmented."

We did not investigate this aspect in any great detail, although an important early supposition was that the fragmentation of the teachers would affect the children similarly.

TOO WIDE A SPAN OF ABILITY GROUPS

Another source of fragmentation appeared to be the wide span of ability groups to plan for. A quarter of the teachers in the interview saw fragmentation as the constant planning and replanning of all the groups, particularly in reading:

> "It is the constant redefining of groups — reading groups in particular."

> "It is having to deal with so many levels of skills at once and so many different kinds of problems."

In a study done by the teachers in one of the schools, they found that a major area of stress was not, as they suspected, dealing with the disturbed children in their classrooms, but rather dealing with the range of academic, social, emotional and physical abilities of the children in their classrooms. As the teachers described it in our interviews, there is "too much to do," "too many things to keep track of," "too great a span of ability to plan for."

> "There are so many emotional problems, how can a kid learn when things are so bad? I never know which problems to solve, the emotional problem or the educational problem."

> "Fragmentation is built into the structure of a combined fourth and fifth grade classroom. The ability range is anywhere from grade two level to the highly gifted."

It is possible that the range of children's abilities is greater than teachers have ever been expected to deal with before, because of mainstreaming. However, we do not have any data bearing on this issue.

LACK OF FELT SUPPORT: A COMMUNICATION ISSUE

The information we had hoped to find in the written questionnaire relating feelings of fragmentation to communication patterns appeared in the interview questionnaire in answer to "From whom do you get support?" Those teachers who experienced high degrees of fragmentation reported significantly fewer sources of support.

Of the nineteen teachers interviewed, six teachers felt a high degree of fragmentation. They listed their sources of support as follows: rest of staff, principal, another teacher (2 responses), husband, no one (2 responses). (This is a total of 5 sources of support.) In contrast, the six teachers who reported little fragmentation totaled 13 sources of support, and the seven moderately fragmented, 14. Their list of sources of support went considerably beyond that of their more fragmented-feeling colleagues to include guidance counselor, school parents, children, specialists, another teacher, rest of staff, workshops, family, and friends outside of the school. Fragmented teachers also used the Teacher's Room far less than did the others. This finding, along with our earlier observations on emotional boundaries, suggests that highly fragmented teachers are not as adept at finding ways to meet their own needs, whether by setting boundaries or by communicating with available sources of support.

TEACHERS' CONCEPTIONS OF CURRICULUM

Another source of fragmentation is the teachers' own perspectives on what and how children need to learn. Many teachers set priorities as if each aspect of the curriculum were separate.

> "Last year I had art at 8:30 A.M. The children were very interested and when the hour was up and I returned we continued on this activity. The children don't mind the art but I did, because I feel that this should be the time for reading rather than art."

> "Sometimes music lessons are discouraging . . . what are the priorities, music or math?"

> "I teach the basics in the fall and leave social studies, health, science until later in the year."

"I'll fit social studies in if I have time."

This conception of curriculum seems to contribute to the pressure that teachers feel about children "missing things," since the activities they go to outside the classroom are not seen as *different* ways of achieving the *same* curricular ends, but as something extra, unrelated to the classroom activity. This perspective is, in fact, suggested by the very definition of special services as supplementary, rather than complementary, to the work of the classroom. We will comment about it further in the section on policy implications.[1]

Overall, the evidence suggests that some activities create new problems even as they try to solve old ones. Providing special services in the current format, with additional personnel taking children from their classrooms, has some unanticipated but very real consequences. It means that the more the students get help, the worse some of the teachers feel — which in turn is probably not beneficial to these students. Furthermore, teachers' needs for support and their conceptions of curriculum are essential elements in the real effects any activities will have. What seems called for is a method, or a set of methods, to provide the necessary extra services in forms that are more integrated with and responsive to the child's total cognitive and social experience, and which recognize the part teachers and their perspectives have in the ecology of the school, rather than simply having services tacked on as extra elements in the school day.

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[1]See p. 13-14.

POLICY IMPLICATIONS OF THE STUDY

The impact on teachers of the complex phenomenon which has been labeled fragmentation requires examination from the points of view of local, state and federal policies. While the feelings of fragmentation described by teachers have their immediate roots in the classroom and the local school, some of the factors that generate these feelings can be addressed most cogently through policy analysis, new policy interpretation or, where necessary, new policy development.

There are several important factors uncovered by the study which contribute to teachers' feelings of fragmentation, and which seem to us to require policy-makers' attention:

1. teachers' experiencing interruptions and lack of continuity, and their related feelings of the need for longer time-spans;
2. teachers' conceptions of curriculum;
3. the wide span of ability groups for which teachers must make plans;
4. the communication process in the schools, both between teachers and specialists and in relation to teachers' sense of support.

INTERRUPTIONS AND THE SUPPLEMENTARY NATURE OF ANCILLARY/SPECIAL SERVICES

The fact that ancillary and special services such as Title I, bilingual education, music, art, physical education, occupational education and speech are treated, both in concept and practice, as supplementary, not complementary, seems to us to be directly related to the number and variety of interruptions which occur during the teaching week. Many of these regularly occurring interruptions are the support services for individuals and small groups of children requiring Title I, learning center instruction, speech, occupational education, or bilingual education.

We found feelings of fragmentation higher in the Daniels School, which has Title I services, than in the other two schools, which do not.[1] This seemed to support our major finding, that the addition of programs which increase comings and goings also increases feelings of fragmentation. However, since the Daniels School is also larger than both the Maplewood and Salemwood Schools, we cannot rule out the possibility that overall size is the variable leading to these greater feelings of fragmentation. (It would be interesting to be able to clarify these two possibilities through further research, comparing schools of different sizes, each of which has Title I programs, or same-size schools with and without Title I.)

The investigators reviewed some of the state and national legislation regulating ancillary/special programs. They found that in most instances the local education agency was both permitted and instructed to design its own programs based on local needs. The guidelines gave ample leeway in formulating the conduct of programs and supported the provision of services in site-specific ways. However, the Title I legislation gives a clear directive from the Federal Government that Title I programmatic funds must not supplant regular non-Federal funds:

> ". . . the educational agency may use funds received under this title only so as to *supplement*[2] and, to the extent practical, increase the level of funds that would, in the absence of such Federal funds be made available from non-Federal sources for each of the special programs."[3]

The intention of the law is that non-federal funds supporting services not be diminished as federal funds are received. However, the study suggests a need for further developing and clarifying the Title I regulations in order to focus on the prevention of fragmentation of services. The present system encourages the conception of programs as "add-on" rather than as integral parts of service designs.

Section 124-(f)(1) of the regulation states that:

> "in order to avoid duplication of efforts and to ensure that all programs and projects *complement*[4] each other, the local educational agency shall also demonstrate that it has considered of-

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[1] See Table II, p. 3.

[2] Investigators' italics.

[3] Public Law 95-961, Title I – Amendment to Title I of the Elementary and Secondary Education Act of 1965, November 1, 1978, Sec. 126 (c).

[4] Investigators' italics.

fers of assistance made by other agencies which may aid in carrying out or making effective the program or project . . ."[1]

This is the only instance found of a reference to the concept of developing services within an integrated or complementary framework. The focus of Section 124-(f)(1) is indeed laudable. However, it is not sufficiently developed. It only requires that efforts be made to ensure that services to children complement each other when they are provided to the educational agency from an *external source*. Based on the findings of the study, what is clearly needed in addition is a parallel stipulation requiring that the internal structuring of programs and services to children and families be developed within a cohesive framework.

Teachers and children who expressed feelings of being fragmented and "missing" are describing the absence of a sense of continuity. While the experience of continuity in the teaching-learning process is an individual, internal affair, we suggest that regulations could be framed in ways which will encourage and enhance the integration of programs and services. If the regulation can be structured so that it sets a tone of integration rather than "separatism," then the local school system and the local school can help to create an environment which supports continuity for both individuals and the group. An example might be a regulation which requires the local education agency to demonstrate through its proposal the way(s) in which the new services will be integrated into the ongoing curriculum which is already in place. Such a regulation could open the way for a wide range of possibilities that could be structured in response to the needs of particular settings.

If the "continuity perspective" becomes a conscious effort in the planning and implementation of programs, teachers and children may come to feel much more positively about the many services which may be available to them.

LONGER TIME SPANS FOR INSTRUCTION

The data indicate how much most teachers value uninterrupted time and/or longer time-spans with their classes. It seems that longer time-spans permit the teacher to plan with greater awareness of each child, less pressure to meet externally imposed schedule requirements, and flexibility so that curricular activities can be shortened or prolonged, as necessary.

In reviewing the Federal Title I legislation, it becomes clear that the planning of longer time-spans for instruction is a matter of system-wide and school-by-school policy. Programs must be "of sufficient size, scope and quality to give reasonable promise of substantial progress toward meeting the special educational needs of the children being served."[2] The Federal Title I regulations imply through such words as "sufficient scope and quality" that there will be provision of an adequate and qualitative time-span for achieving Title I programmatic goals. But program is an institutional variable, rather than a personal one. Program does not always translate into an individual *child* having a long enough interval of instruction so that s/he might experience absorption, investment, and mastery.

Fragmentation has been defined in this study as a feeling of frustration, a sense of being unable to carry out a job in a satisfactory manner and a lack of coordination of effort, schedules, personnel and time. It is important to remember that the same feelings of frustration and lack of coordination that are being experienced by the teacher may also be experienced, on their own personal level, by the children.

On the state level in the Commonwealth of Massachusetts, Chapter 766 describes in very general terms the regulations for a child who is to have a regular education program with modifications ranging from 25-60% time out. The time-spans in program implementation have been left completely to the discretion of each local educational agency in the same way that the determination of appropriate time-spans has been left to local discretion in the Federal regulations. Teachers' responses to the study demonstrate that it is not enough to legislate a certain percentage of hours for instruction. What is also urgently needed is a policy formulation which will encourage attention to the scope and quality of each child's total learning experience. There could be a requirement in the writing of each child's Education Plan, for example, that there be demonstration of how the learning experience will be designed to foster integration of learning rather than a conglomeration of distinct, separate, specialized areas (e.g. occupational education, speech therapy, art, etc.).

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[1]Public Law 95-561, *op. cit.* Section 124-(f)(1).

[2]Ibid; Section 124-(d).

READING AND MATHEMATICS: THE TEACHERS' CONCEPTIONS OF CURRICULUM

The "supplementary" nature of most auxiliary services may, in fact, contribute to what is often found to be the classroom teacher's compartmentalized conception of elementary curriculum. Reading and mathematics are frequently emphasized to the exclusion of social studies, science and the arts. The compartmentalized conception of curriculum becomes a constraining factor as programs for the year are constructed. As one teacher stated it, "I'll fit social studies and science in, if I have the time."

The narrow interpretation of curriculum is evidenced also in the pressure that teachers feel about children "missing things," since the activities children go to outside the classroom are not seen as *different* ways of achieving the *same* curricular ends, but as something extra, unrelated to the classroom activity.

From the point of view of the investigators, this approach narrows the possibility for integrating the kinds of learning and the satisfactions that can accrue to both children and teachers from their participation in a more holistic curriculum.

More support is necessary on all levels of policy-making for the pedagogical point of view that skills in symbolization are developed through the behavioral and natural sciences and the arts, and that reading and mathematics are also integrated functions of these disciplines.

Perhaps, on the local school and school system levels teachers and support service staff could explore policies which would lead both groups to view each other as complementary. As a beginning, the perception of many teachers that children are "missing things" could be used as the basis for such mutual exploration.

TOO WIDE A SPAN OF ABILITY GROUPS

The wide span of ability groups with which teachers have to deal in their classes appeared to be another source of fragmentation. Specifically, teachers who were interviewed referred to the constant planning and replanning necessary when attempting to meet the wide range of academic, social, emotional, and physical abilities of the children. One of the factors contributing to the wider range of abilities accommodated in a class may well be the regulation which calls for children to be mainstreamed.

Embedded in concerns about a wide diversity in the classroom, then, is the need for policies which support responsiveness to the diversity. Assessment of teachers' skills, backgrounds, preparation and previous experience can lead to designs of staff development which constructively address those assessed needs. Policies which support help for teachers to become more skilled in planning programs to meet wider ranges of need will address issues of fragmentation in direct ways. This means that as new programs are designed and policies formulated staff development must become a simultaneous consideration.

We feel impelled to add however, that there is a problem with all of this. Proposing that classroom teachers be helped to accommodate more diverse kinds of children and new program initiatives in their regular classrooms, by providing them with training and support, is an improvement on the present system of policy changes which do not always provide such training and support. Yet we are still involved in adding new responsibilities to teachers' roles while continuing to expect them to carry all their old responsibilities as well. There is a point up to which staff development can indeed help teachers expand their skills in order to be able to do all this. But there is also a limit to the diversity of roles we can expect teachers to play, even with ongoing staff development support, and that, too, must be given some attention.

THE COMMUNICATION PROCESS

The requirement for a communication process around the Federal and State educational regulations is focused on the "educationally deprived" child entering a supplementary program and the evaluation of his progress. Title I expresses this in relation to the development of the individualized plan:

> "It is the intent of Congress to encourage, whenever feasible, the development for each educationally deprived child participating in a program under this title of an individualized educational plan (maintained and periodically evaluated), agreed upon jointly by the local educational agency, the teacher, a parent or guardian of the child, and, when appropriate, the child."[1]

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[1]Ibid; Section 129.

The Commonwealth of Massachusetts has both a pre-kindergarten and a continuous screening program which are used to identify children with special needs.[1] The communication process developed for children who require various kinds of special programs in Massachusetts is very similar to that mandated by the Federal Title I regulations.

A core evaluation team (CET) is organized to develop the best possible educational plan for each child who is evaluated. Periodic evaluation of each plan is mandatory. But the communication channels are both formal and infrequent.

As the study findings have emphasized, the communication process in the local school between teachers and specialists seems to occur best through informal conversations. In addition, the more the teachers feel that they understand what the specialists are doing, the more they see the specialists as being helpful both to the children and to the teachers themselves.

The primary question raised by both the findings and the regulations cited is whether policy on the federal, state and local levels permits the allocation of necessary time and provides the economic resources to support the communications processes. Evidence from the study indicates that spontaneous "doorway/hallway" conferences between support service staff and the classroom and resource room teachers are valued by each. Job descriptions for support service staff need to include a clear expectation that regular communication will occur among classroom and resource room teachers concerning the programs and the children for whom they provide services. In addition, the plan for the teacher's contractual day should reflect that time for this essential communication among constituents is supported and valued by the local board of education.

SOME GENERAL POLICY GUIDELINES

If continuity and integration of experiences and coordination of personnel are important goals toward which to strive, a systematic review of present practices in the elementary school needs to be undertaken with particular emphasis on the ancillary services. This should occur at all levels of policy implementation.

In the future, when new policies are being considered, those responsible for the formulation of policy should include in their proposals "policy impact" statements related to continuity, integration and coordination of the suggested program(s) and service(s).

At the level of policy-making, supportive models could be described which provide a coordinated approach to program development. This implies that policy-makers would evaluate existing programs so that their programmatic strengths could be maintained as the foundation for integrating new policy development. The process of development itself ought to model and reflect the values of coordination and integration. This requires that local constituents be involved during the policy formulation stages, and provide feedback to insure accurate articulation of policies. Local practitioners, be they administrators, teachers or association (union) representatives, as well as parents, must be actively involved in working toward continuity.

PERSONNEL POLICIES

The contractual assignments of classroom, resource room and ancillary teachers are usually made for the period between September 1 and June 30 of the school year. The usual expectation is that all teachers work a day of similar length. The following excerpt from a teacher's association contract with a local board of education serves to illustrate this:

> Except as provided below, the starting and dismissal times for students has been and will continue to be as follows:
>
> Elementary School
>
> | | |
> |---|---|
> | Kindergarten (one session morning and afternoon) | 8:30 A.M.-11:00 A.M.
11:45 A.M.-2:15 P.M. |
> | Grades 1-6 | 8:30 A.M.-2:15 P.M. |
>
> The workday of classroom teachers will begin fifteen minutes before the aforesaid starting times and will end thirty minutes after the aforesaid dismissal times . . .[2]

Since schedules must be made for all teachers in the school, they tend to be set in the fall for the whole school year. Once set it becomes very difficult to shift the arrangements.

The exploration of other possibilities for personnel policies which would be supportive of more continuity for children, teachers, and support service personnel should be considered. The investigators offer some suggestions for consideration.

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[1]Chapter 766 of the Acts of 1972 Commonwealth of Massachusetts. See Chapter 3, Identification, Referral and Evaluation.

[2]Agreement between the Malden School Committee and the Malden Teachers' Association 1976-77, Article 5-01 and 5-02, p. 11.

Role and Function of Support Services

Throughout this study we have frequently used the terms "support staff" and "support services" in referring to personnel and services which are usually labeled "ancillary" or "auxiliary." In our view this terminology more accurately reflects the idea that with few exceptions, professional personnel engaged in the school setting share a similar goal, the enhancement of learning for the children with whom they work. This is true at varied levels, from administrators to teachers and "specialists."

Specialization is a cultural phenomenon which has widespread effects throughout society. The last two decades have witnessed the era of specialization in education. In the attempt to broaden and enrich the base of educational support for children, the delivery of services to them has become increasingly fragmented. In order to begin to deal with the feelings of fragmentation experienced by so many teachers, it will be necessary to make conscious efforts to counteract in the schools the cultural phenomenon of increasingly limited and compressed specialization. In the view of the investigators, a needed reconceptualization of the role and function of all school personnel should begin with considering them as a support service to the child and the family.

The role and function of the support service staff requires the attention of policy-makers. This study, as well as others,[1] points out that within a school culture, those who are "different" are likely to be rejected. The Title I teachers, the speech therapist, the occupational education teacher, the bilingual teacher, the learning disabilities teacher and other support service personnel are frequently perceived as adjunct faculty. They are viewed as "different" from the main body of classroom teachers. This perception often results in support service staff feeling that they are being discriminated against or are viewed by classroom teachers as a minority group.

This perception may stem from many differences: in schedule, work arrangements, job security and seniority, salary, requirements to attend meetings, background and training, and other aspects which seem to differentiate them from the "regular" classroom teachers. It is important to maintain awareness of the impact of these differences as policies are developed to support more integrated approaches to curriculum, program, schedules, children and personnel.

Alternate Structures to Support Instruction

There is a need to review and evaluate the ways in which decisions are made about whether children should receive support services in their own classrooms or in other settings. In the schools in which this study took place, all of the supplementary programs were conducted in settings other than the child's own classroom. The study findings indicate that a strong recommendation should be made that a system be designed with more than one option for the delivery of ancillary services. The support service program might also be conducted in the child's classroom, in an assigned setting other than the child's own classroom, or in shared spaces such as may be available in open space schools. The needs of the classroom teacher are crucial in this design. As was previously reported, teachers feel ultimately responsible for each child's learning. In actuality, the classroom teacher does carry the major programmatic responsibility for the children assigned to his/her room. But both classroom and support personnel have expertise and knowledge related to the needs of individual children. Thus it is important for both support teachers and classroom teachers to share their insights, taking into account the needs of the children they work with, as well as what works for the teachers themselves. The emphasis should be on a collaborative approach to program design, not the *imposition* of one set way of providing support services.

Educational policy could be written which would encourage a variety of innovative ways to provide support services. One such method is to design services to be provided for children who have particular, individual needs through a support teacher who works in the classroom on a regular basis. This design would enlist the cooperation of several classroom teachers so as to regularly attach a support teacher to their classrooms. The support teacher would plan and work with each classroom teacher to provide the needed services for the whole class but particular emphasis would be placed on the children whose special needs are to be addressed. The alternative method of taking children out of the classroom may, of course, prove more effective for some teachers and children, and should also be available as an option.

Support personnel actually do perform functions which are different from the functions of classroom

[1]See *The Culture of the School and the Problem of Change*, by Seymour B. Sarason, Allyn & Bacon Inc., Boston, 1971; and *The Planning of Change*, by W.G. Benne et al., Holt Rinehart & Winston, Inc., 1969.

teachers. Together, the two groups have a broad perspective on children and a variety of resources to enhance learning. The possibilities are unlimited if the two groups can coordinate their efforts flexibly and in ways which are responsive to both the individual needs of children and the possibilities and constraints within each particular setting.

This idea can be made concrete in terms of some of the findings of this study. Many classroom teachers, as well as resource room teachers, have indicated that they function best in longer spans of time than are usually allowed by school schedules. With this as a given, the question arises as to whether longer spans of focused time might not be more productive in the work of these teachers and in the work of other support personnel, as well.

The traditional time at which the year's schedule for teachers and children is fixed has been referred to earlier. One possibility which would help to ameliorate the negative effects of this inflexible approach to scheduling has emerged from the study. If it is actually a necessity that scheduling decisions be made within the earliest weeks of school, there should be a local school policy which reserves some spaces in the schedule to be assigned to children (or groups) whose needs will be identified at a later point in the year.

One can look at a school schedule as having the potential to be somewhat flexible and responsive to emerging needs. The possibility of affiliating a support teacher with an after-school program which could then offer tutoring services in specific skill areas is no longer beyond the realm of imagination. Support teachers could be available for children who need help with any aspect of homework or specific tutoring in skill areas during non-traditional school hours.

Another recommendation which clearly emerges from the findings and toward which policy-makers should focus attention is the following: consulation time for support teachers, classroom teachers and resource teachers should be built into the weekly in-school schedule. The lack of regular communication among the personnel who work with children due to constraints of both time and schedule has been a serious concern of participants in the study. Policy could be developed to address this issue very productively.

If "innovative" and "different" are viewed from a positive perspective rather than from the commonly held negative perspective of fear or rejection, the possibilities for responsive policy development can be enhanced. Policies can be developed which describe how educational services can support rather than supplant, can complement rather than supplement (with all the negative implications of a deficit model) and can integrate rather than fragment. The development of forward looking policies could have a profound effect on the issues of fragmentation to which this study has been addressed.

PUTTING THE PIECES TOGETHER: SOME PRACTICAL RECOMMENDATIONS

Throughout our work on the study of fragmentation we were impressed with the various ways in which teachers have addressed some of the problems which lead to feelings of fragmentation. It seemed important to share, in the form of recommendations, some of the things teachers and administrators have done as well as some thoughts of our own. Even if new policy recommendations are implemented, it may be some time before their impact is felt. In the meantime, teachers and administrators may wish to consider some possible options for addressing the issue of fragmentation.

We do not view the categories nor the list of suggestions as being complete. They may provide fresh ideas for some and seem routine to others. However, we hope they will be useful in "sparking" a sharing of ideas.

OPTIONS FOR CLASSROOM TEACHERS

Space Arrangement: Materials, Equipment and Information

The arrangement of space can frequently serve to limit the interruptions experienced by teachers as well as by children. Room arrangments can encourage freedom of movement, independence in selecting materials and easy access to key areas. What follows is a beginning list of practical suggestions which have been made by teachers.

1. Some teachers have found it helpful to place their desks close to the entryway of the classroom. People who have messages or materials to deliver or pick up could do this without imposing themselves on the classroom by walking through it. One teacher used her desk as an information and special equipment center. In/out boxes were used for the flow of outgoing messages, attendance cards, and lunch slips, as well as incoming notices, memos and notes. Special materials such as large scissors, magic markers, the stapler, construction paper, scotch tape, and the paper punch were kept in drawers with a sign-up sheet for use by out-of-class borrowers.

   Another teacher had two "desks." One was used as an information and supply center while the other served as her planning center and remained off limits to all but herself.

2. If children have easy access to equipment and materials they need, they do not have to ask the teacher for "each little thing." The number of internal interruptions is diminished. For example, if such items as paper, pencil sharpener, worksheets for the day's math lesson, and extra reading books are kept in specific and accessible areas, children can both help themselves and comfortably return them.

3. A comfortable space in which children could find quiet, privacy and a feeling of welcome was devised surprisingly easily by one teacher using just a few pillows, a rug and a low shelf. (She selected a light corner of the room for the reading corner. However, a lamp could provide light for a darker space.) Rules were worked out so that children could withdraw to this space without interrupting the teacher.

4. If the teacher's noise/activity tolerance is up to it, a classroom setup in which there is a variety of different activities occuring at the same time, with children moving freely, makes shifts of activity part of the fabric of the day. It allows for greater flexibility of spans of work time. Children coming and going, in this case, do not represent so much of an interruption.

   Such a classroom arrangement requires an openness which allows children to have a say in their day. Teachers selecting this mode need to consider and respond to their own needs as well as to those of the children.

Routines: Setting Priorities

Feelings of fragmentation are also related to the many routine tasks teachers must attend to each day. The routines oftentimes cause interruptions, which in many instances can be avoided by turning over some of the tasks to the children. Setting priorities related to the child and the curriculum within the context of the everyday classroom routines also helped teachers to alleviate feelings of fragmentation. What follows are some questions related to routines and setting priorities and some solutions which teachers found worked for them.

1. In what ways can routines help to minimize classroom interruptions? For what kinds of

routines can children be responsible? What routines might lend themselves to a written check list? Does the teacher have expectations and rules about the use and storage of materials? Do the children understand them clearly?

2. Many children enjoy the opportunity to be a "Resource Materials Custodian." They also enjoy such activities as taking attendance, collecting money or checking classroom supplies. If the possibility for this is facilitated, the teacher does not have to expend his/her time and energy. These kinds of support activites usually require some form of list. If the children are too young to read lists easily, pictures can be used along with the words.

3. Setting priorities helps. If the teacher feels he/she cannot accomplish everything each day, at least he/she knows that the essentials have been covered. One teacher's high priorities were that "every day every child reads, and every day we spend time talking." Another teacher arranged to have uninterrupted "individual time" with each child, either daily or less often.

4. As a way of helping to determine curricular priorities, one teacher arranges for a meeting of all the grade-level teachers for discussion and decision-making about what is most important to cover. It might also be possible to use such a meeting as a way to share ideas, establish a problem solving clinic and/or meet with specialists.

Missing Parts of the Program: Ways to Help Children Reconnect

Many teachers seem to be concerned that children "miss things" in class while they are outside of the classroom and involved in support service activities. Both the leaving and the re-entry routines frequently become sources of fragmentation for teachers and children. What follows are some practical ways which teachers have found helpful in minimizing these disruptions.

1. When planning each day's schedule, one can arrange to present basic, important information or material when all of the children will be present. There are legitimate alternative ways for children who have missed class time to complete the assigned work. Some teachers:

   a) trim down the assignments in order to match the skill levels of the re-entering children. They feel that what is important is for the child to keep up with the essential subject matter rather than complete all desk work.

   b) combine activities such as art and writing, to give more skill practice to children who have been out during a writing session.

   c) provide a variety of worksheets, some requiring less time, to accommodate to the needs of children who have less in-class time.

   d) plan oral activities when the children with reading problems are in the room and do more written work when those children are out being tutored.

   e) use resources other than texts and basal readers for reading practice — magazines, newspapers, comic books, children's novels and advertising are "readers," too.

   f) One teacher suggested trying every idea and every way of doing things that you can think of at least once, and then deciding what works for you.

2. Children who return from support activities need to know what is going on, or what they should be prepared to do next, without having to interrupt the class or the teacher. Many teachers list the day's schedule of activities on the blackboard. However, for pre-reading children and for those who have reading difficulties, such a list might be a better and more useful source of information if it were also illustrated. A drawing of a clock with hands set to the right time can also help children to monitor their own coming and going.

3. In one classroom a child who volunteered to serve as the "resource person" for the day helped to bridge the "re-entry" for children who had left the classroom to attend special service activities. The "resource person" was carefully instructed by the teacher to be responsible for the directions of the day and served as a much needed conduit of information for children who had been out of the room.

Communication

Besides the problem of interruptions and children coming and going there is another set of concerns. It involves communication about the content of what children are doing outside the classroom, its connection to in-class work, and issues related to the children's self-esteem and their social relationships in

the class. These issues might be dealt with in the following ways:

1. If a large number of children in a class go out to special services, it will not be possible to have a detailed awareness of each child's work and achievements at each moment. It might be supportive to focus in detail on a few children each week, while keeping general track of all. In this way the teacher can make sure to get around to every child in depth, at least on a monthly basis.
2. By asking a child from time to time, "Would you share something you did this week in Ms. X's class?" (a Title I session, for example), the teacher may find out a great deal about how the child is feeling as well as his/her perception of how things are going. The idea is not to snoop on Ms. X, but rather to design ways in which to support her work with that child and to help the child to know that what he does is important and valued.
3. "Group talks" can be worked into the schedule which help children share what they are doing in Title I, or the Resource Room, with a subgroup or with the entire class. This is one way children can provide information about what they are doing in their support activities and at the same time be helped to feel less isolated.
4. Another way of making a child feel special rather than "different" is from time-to-time to allow the child to pick another child to go out with him or her to the special service.
5. Or, if a specialist suggests that a child, or children, could productively receive additional reinforcement in an area which parallels the "regular" program, this recommendation would be communicated to the classroom teacher. Special areas of focus could be very effectively woven into the ongoing curriculum of the classroom.

   One illustrative example might be a small group of children who are working with a Title I reading teacher on stories involving the names of animals. The classroom teacher could plan to reinforce this effort by having available books about animals on a variety of reading levels and planning a lesson related to animals in which the Title I children could participate with success and satisfaction.

OPTIONS FOR SUPPORT SERVICE AND CLASSROOM TEACHERS

There are a large number of issues which center on communication between support service teachers and classroom teachers. These issues need to be addressed by people from each category. The next set of recommendations is addressed to both groups. In some situations, the initiative for communication may need to come from the Principal or the various Directors of Special Services. What specialists and teachers *together* can do in setting up schedules for support services is to investigate the arrangments which will result in the least amount of fragmentation for both teachers and children.

There is a continuing need on the part of both teachers and children for sufficient, unpressured, uninterrupted time to allow for the development of relationships between teachers and children, social relationships among children, and productive learning procedures and supports. Sometimes these needs for continuity seem to be mutually exclusive. For example, a specialist who sees a child regularly provides continuity with respect to the subject focus and the materials with which she is teaching and with the child's relationship with her. However, as currently structured, her activities interrupt the continuity required for the child's absorption in class learning and in class relationships.

As things often work out, the situation is a "trade off" of gain and loss for the child. The question remains, how can the child's need for continuity and connection be met?

Toward Flexibility of Scheduling

It is possible to think experimentally about scheduling patterns.

1. Support service staff might meet with children for longer time-spans but with less frequency.
2. A "flexo" time schedule might be arranged in which support staff come an hour after school begins and stay for an additional hour after regular school time.
3. A staggered schedule for children could be structured so that they do not miss the same classroom activity each day. It is necessary always to keep in mind the delicate balance between the needs of the child, class needs, the needs of the teacher, and the needs of the specialist.

Support Service Staff and Role Possibilities

1. Under certain circumstances, support service staff might have other roles. They could arrange with a classroom teacher to participate in "regular" classroom activities. They could read a story, share a hobby, join in a gym period, play some of the games used for special needs children with the whole class, just for fun. Of course, in the planning phase, support staff would discuss with the teacher what would be a helpful role for them to take in the classroom. Perhaps teachers and children together could issue such invitations.
2. Classroom teachers and support service staff have many competencies which they can share productively in more formal ways with one another. "A teaching sharing workshop" was organized by one school system to share the expertise of individual teachers. Inservice education time was utilized for this purpose.

Supporting the Communication Process

1. The administration can be asked to regularly schedule time in which teachers and specialists can make appointments with each other to communicate formally or informally about individual children's programs and their overall skills.
2. Ways to facilitate informal communication between special service teachers and classroom teachers can be structured. For instance, they can have lunch with each other and get acquainted on a more personal basis.
3. Support service staff could encourage teachers to invite them for the purpose of getting a general idea about the program so as to complement it in individual sessions with children. Another productive purpose could be to observe a child. Seeing a child function in a large group situation can provide a different perspective for the support service teacher. It is conceivable that these visits could be productively scheduled on the same day as teachers and support service personnel have appointments with each other.
4. If a way could be structured to free a classroom teacher so that she or he could occasionally observe the special services small group programs, the accrued benefits in both mutual understanding and communication would be impressive.

Inservice Implications

1. As special service programs proliferate, the number of people involved in the system overall can become overwhelmingly large. In this case it might be wise to stop meeting all together as a single large group. Smaller meetings of people who share particular concerns will probably be most productive.
2. In some areas, encouraging interested people from other role groups to attend support activities and/or meetings has had very productive "spin off" effects. For example, classroom teachers who have attended some of the Title I inservice meetings have both given and received helpful ideas and perceptions.
3. Inservice days can focus on issues of fragmentation or communication. Teachers have reported satisfaction with inservice days ranging from the sharing of ideas for organizing time to finding sources for professional support. There have been some very successful workshops in which classroom teachers and special service teachers have had opportunities to expand perceptions through role reversal activities.
4. Teachers who have investigated previously untapped in-school sources of personal/professional support have frequently reported in glowing terms about the success of their investigations. Sometimes they have discovered people in roles very different from their own who were also eager to make personal/professional "connections." These dyads have shared and developed ideas, compared notes and found mutual reassurance available from what were sometimes unexpected sources.
5. Would a skilled consultant with some responsibility for staff development be useful in a given setting? Such a resource might be found in a perceptive teacher from the same school or from another school. Schools associated with teachers' centers have the opportunity to utilize this excellent resource in locating the kinds of consultants who would be most useful. Some schools have had good results in obtaining useful sources through contacting the regional centers operated by the State Education Department. Sometimes an outside resource person can provide a different or expanded perspective.

OPTIONS FOR ADMINISTRATORS

It is clear that administrative initiative and support are essential in finding solutions to many of the problems which give rise to teachers' feelings of fragmentation. The following are some ideas emerging from the study which have important implications for school administrative policy.

Facilitation of Communication

The study results indicated that an administrator cannot safely make assumptions about how much classroom teachers and special service teachers really know about each other's work. The findings indicate that successful administration of diverse programs will involve the structuring of both formal and informal opportunities for teachers to share ideas and concerns with each other.

1. A regularly scheduled staff meeting held early in the fall succeeded in increasing understanding and communication between classroom teachers and special service teachers. They talked about what they did, what difficulties they had and what they had hoped for. Perhaps such a meeting could be structured so that small groups of classroom and special service teachers work together on problem solving.
2. An administrator reports having regularly scheduled informal pot-luck breakfasts with staff. People sit at tables with other staff members who work in the same area of the building. Sometimes there is a deliberate mixture of old and new staff or classroom and special service teachers. Both the administrator and the staff report their satisfaction with the communication set in motion through this process.
3. The principal can regularly schedule specific blocks of time for classroom and special service teachers to use as consultation times with each other. These could be either incorporated in the inservice schedule or planned as separate meetings which have been agreed to under the teachers' contractual arrangments.

Scheduling: A Way to "Put the Pieces Together"

The study findings suggest the need for input from classroom and special service staff as schedules are made. The findings also indicate the importance of maintaining some schedule flexibility well into the school year.

1. Administrators should see to it that they involve both classroom and special service teachers in the process through which the schedule is designed. Both groups should meet together one or more times, to provide essential information and the exchange of varied perspectives, and then try to plan the schedules accordingly. The administrator's role is that of mediator and, if necessary, final decision-maker.
2. Flexibility of time, space, and sequence should be built into the schedule design so that emerging needs of children and teachers can be accommodated in responsive ways. This means that the final schedule should be decided upon later in the year than is the usual practice. If this is not possible, it is important to keep at least a few time slots initially unfilled, to provide the flexibility necessary later in the semester as emerging needs become apparent.
3. Important scheduling implications must be addressed if a broader view of inservice is to be supported. The study findings indicate that flexible options should be available which allow teachers to participate in a broad range of staff development activities.

   The administrator needs to actively support the scheduling of released time for classroom teachers to attend relevant workshops which may have been designed primarily for special service teachers. Special service teachers require released time to attend workshops or other inservice sessions which may have been planned primarily for classroom teachers. The schedule is crucial as a facilitation or blockage to this kind of exchange and communication effort.
4. The principal could utilize the schedule to support the exchange of visits among classroom and special service teachers. The need to schedule adequate "coverage" to facilitate this process is clear.

Administrative Support for Innovation

The study findings have led the investigators to make the following recommendation to administrators who want to help teachers, as adult learners, continue to develop and refine their teaching skills and to value the wisdom of their experience.

1. Administrators who wish to increase the options available for teachers and children need to support a more experimental approach to pro-

viding services to children. The principal has the responsibility to:

a.) locate classroom teachers who would like to experiment with having children leave their classrooms on fewer occasions but for longer spans of time. Or,

b.) find one or more teachers willing to allow a child who receives special services to sometimes select a friend with whom to share a tutoring session.

The principal is in the best position to help these kinds of innovations to occur through the facilitation of communciation between classroom and special service teachers.

Details of Running a School: Can They be Less Fragmenting?

The study findings indicate that the school administration can inadvertantly contribute to the impact of fragmentation through various details of running the school.

1. In consultation with the teachers, administration should set aside clear and appropriate times for daily P.A. system announcements and the delivery of routine notices to classrooms. These kinds of interruptions will have a less fragmenting effect if they can be anticipated at a regular daily time.

2. The administration should make every attempt to distinguish as clearly as possible among school plant emergency, semi-emergency and routine maintenance activities which need to be scheduled. Routine maintenance should be done regularly before or after the hours during which children utilize the spaces involved. Administration bears the responsibility to protect both children and teachers from unnecessary interruptions and frustrations which lead to feelings of fragmentation.

3. It will not always be possible for the above recommendations to be followed. Therefore, an additional recommendation is made that the involved teachers be consulted about the timing of non-routine, essential maintenance work to be done in their spaces during their teaching hours. There are more convenient and less convenient times to be interrupted during the course of the day.

OPTIONS FOR WORK WITH PARENTS

Interviews with parents which were held in conjunction with the research brought a number of parent-related issues into focus. Throughout the interviews with parents the major, underlying themes which emerged repeatedly were the need to understand the school's impact on themselves and their children, the need for support and reassurrance and the continuing need for information. What follows are some of the suggestions which emerged from the parent interviews.

1. Early in the fall, an orientation meeting should be held for all parents of children who are entering any support service program for the first time (e.g., Title I, bilingual education, speech therapy). Parents of children who are continuing in any support service should also be invited to attend. These "veteran" parents could be particularly helpful in creating a network of support for new parents.

2. An Information and Resource Center organized by parents should be established to provide information to parents concerning school resources and special services. Local school information and support in preparation for a conference with a teacher should also be available through this source. Parents who take on the responsibility for providing this service should receive appropriate training and current, updated information.

3. For any subject in which a child receives support service tutoring, the classroom teacher should not be required to give a letter grade. Parents feel that reporting on the child's progress in those areas should be done by the special service teacher in a descriptive format and/or through a parent-teacher conference. A realistic appraisal should be shared with the parent(s). Understanding and support of this stand by the administration would facilitate this more constructive and realistic approach to "grading" a child who is receiving needed special services.

CONCLUSION

These practical recommendations for putting the pieces together will require careful thought and hard work. Change in the "status quo" is usually difficult.

Some of the recommendations and suggestion which have been made in these pages have far-reaching implications.

This effort is only a beginning. We are interested in putting together a collection of ideas and activities that have worked for teachers, specialists, principals, and parents. Please send us ideas which have worked for you.[1]

Perhaps it would be realistic only to expect a careful reading of these pages. However, we have set our sights higher. We urge you to think further about what you have read and determine what kinds of action would be appropriate for you to take. Fragmentation is indeed an overwhelming and pervasive problem in our schools today. What are we prepared to do about it?

[1]Ideas and suggestions should be sent to: Edgar Klugman, Wheelock College, 45 Pilgrim Road, Boston, MA 02215. If we receive enough responses we will duplicate and share them with the contributors.

APPENDICES

Appendix A

CLASSROOM TEACHERS' QUESTIONNAIRE

Code Number

Name:

Grade Level or Program:

School:

Fragmentation Study Questionnaire

(Remove and discard this face sheet)

FRAGMENTATION STUDY QUESTIONNAIRE

A. Purpose of Study

Part of the Malden Teacher Corps Proposal this year for the Daniels School is a preliminary study of possible causes of what seems to be a marked increase in feelings of fragmentation on the part of classroom teachers. Is there a relationship between these feelings and the increase in state and federal mandated programs? What is the impact of these and other programs on the classroom and on the role of the teacher? To what extent have new demands been placed on the classroom teacher? What are the responsibilities that school personnel carry?

To carry out such a study, to seek possible answers to our many questions, we have formed the following plan:

B. General Plan and Timetable:

1. We are conducting indepth interviews with a small random group in each of the three schools, Daniels, Maplewood, and Salemwood.

2. We are monitoring day-long time/activity flow checks on two classrooms in each school.

3. The classroom teachers at the Daniels School have agreed to have the children note their comings and goings on a Time-Activity chart for a week: this is to be done the first full week following Christmas vacation (Monday, January 8, 1979).

4. We are asking all teachers and specialists to fill out the attached written questionnaire by Friday, January 12, 1979. Answers to the questionnaire will help us look at some of the possible factors that contribute to feelings of fragmentation and indicate areas that need increased attention and consideration. (The questionnaire starts on the next page.) If you are willing to help the study by filling it out, please go on.

5. Study and document the data by mid-February.

6. Report our preliminary findings to all those involved by March.

7. Plan with teachers, principals, and the M.E.A. how best to respond to the results.

C. General Directions for the Questionnaire:

1. The questions are multiple choice. Please circle only one choice unless otherwise instructed.

2. For those questions where we ask for comments, it is all right to be very brief. Cite such possibilities as time, communication problems, etc.

3. We have recorded your name, grade level and school in case we need to clarify specific points or match information. The questionnaires are coded by number to protect your anonymity. The face sheet is for ease of distribution. Throw it away before returning the questionnaire.

4. Questionnaires will be read and tabulated by people *outside* the school system.

5. All findings will be shared and discussed with you.

6. We anticipate that it will take you from 20 to 25 minutes to complete this questionnaire. If you find a question or part of a question difficult to answer, leave it and come back to it at the end. (It's not as ominous as it looks.)

Finally, the questionnaire will help us to know a little about you so we can see how different types of people feel about these issues. We are very appreciative of your willingness to cooperate.

Thank you.

Date: Code #:

Most elementary school teachers find that the matter of TIME is a central issue in their school week. Will you consider the following questions and circle only one answer per line. (The use of letters is to facilitate information for the computer programmer.)

1. In an average week, how much time do you have with all of the children together in your room, approximately?

3 hrs or less:	3 to 6 hrs:	6 to 12 hrs:	more than 12 hrs:
A	B	C	D

2. In an average week, how much time do you have with at least ⅓ of the children in your room at one time?

3 hrs or less:	3 to 6 hrs:	6 to 12 hrs:	more than 12 hrs:
A	B	C	D

3. Approximately how much time *each week* do you think you spend in:

	1 hour or less:	1 to 5 hours:	5 to 10 hours:	more than 10:
a. whole class instruction	A	B	C	D
b. small group instruction	A	B	C	D
c. one to one instruction	A	B	C	D
d. school and/or class business (collecting money, giving out papers to go home, announcements, etc.)	A	B	C	D
e. arranging children's schedules	A	B	C	D
f. attending child related meetings	A	B	C	D
g. attending school/teacher related meetings	A	B	C	D
h. talking with parents	A	B	C	D
i. consulting or talking with others about your children	A	B	C	D
j. curriculum planning	A	B	C	D
k. instruction preparation	A	B	C	D

3. (cont.)

	1 hour or less:	1 to 5 hours:	5 to 10 hours:	more than 10:
l. non-instructional duties (e.g. recess, door, etc.)	A	B	C	D
m. other (please describe): _____	A	B	C	D

_____

4. How much does the coming and going of the children for special instruction have a positive influence on the way you plan and manage your classroom teaching?

A none to speak of

B very little

C moderate

D strong

If you checked one of the last three, please describe, in a few words, the specifics:

_____

_____

_____

5. How much does the coming and going of the children for special instruction have a negative influence on the way you plan and manage your classroom teaching?

A none to speak of

B very little

C moderate

D strong

If you checked one of the last three, please describe, in a few words, the specifics:

_____

_____

_____

6. The children who go out of the room for special services miss a period of class time. Is this a problem for you?

A no

B somewhat of a problem

C of real concern

If you checked the last item, will you describe what sort of problems are created? _____

_____

_____

7. Do you see it as a social/emotional problem for these children?

A no

B somewhat of a problem for some children

C somewhat of a problem for all children

D a large problem for some children

E a large problem for all the children

F don't know

8. Do you perceive that the children who are not eligible for special services have any special attitudes or feelings about those children who are eligible?

A the children treat it as a matter of course and don't talk or ask about it.

B the children talk or ask about it occasionally.

C the children talk or ask about it frequently.

D don't know.

9. Approximately how much time each *week* (other than CORE evaluations) do you spend talking with the following about children in regular programs:

	none	30 min or less:	30 min to 1 hr:	more than 1 hr:
a. parents	A	B	C	D
b. administration	A	B	C	D
c. other teachers	A	B	C	D
d. non-teaching school personnel	A	B	C	D
e. specialists in mandated programs: (i.e. Title I Reading or Math Speech/Language Tutorial Resource Room Learning Center Hearing Impaired/Blind)	A	B	C	D
f. other specialists: (i.e. Music Art Phys. Ed. Occupational or Physical Therapy)	A	B	C	D
g. other (please specify): _____	A	B	C	D

_____

_____

10. Approximately how much time each *week* (other than CORE evaluations) do you spend talking with the following about children in Special Needs programs:

	none	30 min or less:	30 min to 1 hr:	more than 1 hr:
a. parents	A	B	C	D
b. administration	A	B	C	D
c. other teachers	A	B	C	D
d. non-teaching school personnel	A	B	C	D
e. specialists in mandated programs (i.e. Title I Reading or Math Speech/Language Tutorial Resource Room Learning Center Hearing Impaired/Blind	A	B	C	D
f. other specialists: (i.e. Music Art Phys. Ed. Occupational or Physical Therapy)	A	B	C	D
g. other (please specify): _____	A	B	C	D

_____

_____

11. Circle all of the following that tend to be a focus in your conversations with the specialists.

A classroom work

B tutorial work

C scheduling

D individual child academic problems

E individual child social/emotional problems

F information about parents

G information from parents

H report writing

I other (please specify): _____

_____

_____

Many teachers differ in their exposure to what it is that specialists do or the nature of the pressures they work under. We are interested in finding out about your exposure to these subjects.

	very well	reasonably well	generally	essentially not at all	some more than others
12. How well do you think you understand what the specialists do who work with your children?	A	B	C	D	E

If you have checked the last column, please comment briefly: _____

_____

_____

13. How do teachers in your school find out about the specialists' work? (Circle whatever applies)

A staff meetings

B conferences

C grapevine

D informal talks

E. other

14. How important do you think it is for specialists to do each of the following:

	very	moderately	not important
a. be aware of your aims	A	B	C
b. report freqently on child's progress	A	B	C
c. make suggestions about possible alternatives for instruction/management that work for them	A	B	C
d. work with the children in ways which are supportive of your efforts and aims	A	B	C
e. make time to talk with you	A	B	C
f. other (please specify): _____	A	B	C

15. In terms of your experience in your school, most specialists are:

	very	moderately	sometimes	not helpful
a. helpful to children	A	B	C	D
b. helpful to teachers	A	B	C	D
c. helpful to principals	A	B	C	D

16. How do you believe each of the following affects your ability to be an effective teacher for the children who use special services?

	helps greatly	helps somewhat	hinders some	hinders greatly	no opinion
a. physical size of classroom	A	B	C	D	E
b. class size	A	B	C	D	E
c. arrangement of classroom	A	B	C	D	E
d. physical size of school building	A	B	C	D	E
e. numbers of pupils in school	A	B	C	D	E
f. numbers of staff	A	B	C	D	E

16. (cont.)

	helps greatly	helps somewhat	hinders some	hinders greatly	no opinion
g. amount of time spent on curriculum planning	A	B	C	D	E
h. reading written records and reports	A	B	C	D	E
i. test results	A	B	C	D	E
j. personal, informal contact with children	A	B	C	D	E
k. parent conferences	A	B	C	D	E
l. Core evaluations	A	B	C	D	E
consultations with:					
m. specialists	A	B	C	D	E
n. counselors	A	B	C	D	E
o. School Board Guidelines/rules	A	B	C	D	E
p. State guidelines/rules	A	B	C	D	E
q. special needs programs	A	B	C	D	E
r. ancillary programs (physical education, art, music, etc.)	A	B	C	D	E
s. children's attitudes	A	B	C	D	E
t. parent(s)' attitudes	A	B	C	D	E
u. principal's attitude	A	B	C	D	E
w. superintendent's attitude	A	B	C	D	E
x. assistant superintendent's attitude	A	B	C	D	E

16. (cont.)

	helps greatly	helps somewhat	hinders some	hinders greatly	no opinion
attitudes of other non-teaching personnel:					
y. (i.e. nurse, custodian, cook cafeteria)	A	B	C	D	E
z. taxicab driver	A	B	C	D	E
zz. other (please specify):_____	A	B	C	D	E

_____

_____

17. Overall, what degree of fragmentation do you personally experience in the course of an average school day?

very little	moderate	a great deal
A	B	C

Any comments?

Appendix B

SPECIALISTS' QUESTIONNAIRE

Code Number

Name:

Grade Level or Program:

School:

Fragmentation Study Questionnaire

(Remove and discard this face sheet)

FRAGMENTATION STUDY QUESTIONNAIRE

A. Purpose of Study

Part of the Malden Teacher Corps Proposal this year for the Daniels School is a preliminary study of possible causes of what seems to be a marked increase in feelings of fragmentation on the part of classroom teachers. Is there a relationship between these feelings and the increase in state and federal mandated programs? What is the impact of these and other programs on the classroom and on the role of the teacher? To what extent have new demands been placed on the classroom teacher? What are the responsibilities that school personnel carry?

To carry out such a study, to seek possible answers to our many questions, we have formed the following plan:

B. General Plan and Timetable:

1. We are conducting indepth interviews with a small random group in each of the three schools, Daniels, Maplewood, and Salemwood.

2. We are monitoring day-long time/activity flow checks on two classrooms in each school.

3. The classroom teachers at the Daniels School have agreed to have the children note their comings and goings on a Time-Activity chart for a week: this is to be done the first full week following Christmas vacation (Monday, January 8, 1979).

4. We are asking all teachers and specialists to fill out the attached written questionnaire by Friday, January 12, 1979. Answers to the questionnaire will help us look at some of the possible factors that contribute to feelings of fragmentation and indicate areas that need increased attention and consideration. (The questionnaire starts on the next page.) If you are willing to help the study by filling it out, please go on.

5. Study and document the data by mid-February.

6. Report our preliminary findings to all those involved by March.

7. Plan with teachers, principals, and the M.E.A. how best to respond the results.

C. General Directions for the Questionnaire:

1. The questions are multiple choice. Please circle only one choice unless otherwise instructed.

2. For those questions where we ask for comments, it is all right to be very brief. Cite such possibilities as time, communication problems, etc.

3. We have recorded your name, grade level and school in case we need to clarify specific points or match information. The questionnaires are coded by number to protect your anonymity. The face sheet is for ease of distribution. Throw it away before returning the questionnaire.

4. Questionnaires will be read and tabulated by people *outside* the school system.

5. All findings will be shared and discussed with you.

6. We anticipate that it will take you from 20 to 25 minutes to complete this questionnaire. If you find a question or part of a question difficult to answer, leave it and come back to it at the end. (It's not as ominous as it looks.)

Finally, the questionnaire will help us to know a little about you so we can see how different types of people feel about these issues. We are very appreciative of your willingness to cooperate.

Thank you.

Date: Code #:

Most elementary school teachers find that the matter of TIME is a central issue in their school week. Will you consider the following questions and circle only one answer per line. (The use of letters is to facilitate information for the computer programmer.)

1. Approximately how much time *each week* do you spend in:

	1 hour or less:	1 to 5 hours:	5 to 10 hours:	more than 10:
a. whole class instruction	A	B	C	D
b. small group instruction	A	B	C	D
c. one to one instruction	A	B	C	D
d. arranging children's schedules	A	B	C	D
e. attending child related meetings	A	B	C	D
f. attending school/teacher related meetings	A	B	C	D
g. talking with parents	A	B	C	D
h. consulting or talking with others about your children	A	B	C	D
i. curriculum planning	A	B	C	D
j. instruction preparation	A	B	C	D
k. other (please describe): _____	A	B	C	D

_____

2. Children who go out of their room for your services miss a period of class time. Do you see this as a problem?

A no

B somewhat of a problem

C of real concern

If you checked the last item, will you describe what sort of problems are created? _____

_____

_____

3. Do you see it as a social/emotional problem for the children?

A no

B somewhat of a problem for some children

C somewhat of a problem for all children

D a large problem for some children

E a large problem for all the children

F don't know

4. Do you perceive that the children who are not eligible for special services have any special attitudes or feelings about those children who are eligible?

A the children treat it as a matter of course and don't talk or ask about it.

B the children talk or ask about it occasionally.

C the children talk or ask about it frequently.

D don't know.

9. Approximately how much time each *week* (other than CORE evaluations) do you spend talking about children with:

	none	30 min or less:	30 min to 1 hr:	more than 1 hr:
a. parents	A	B	C	D
b. administration	A	B	C	D
c. teachers	A	B	C	D
d. non-teaching school personnel	A	B	C	D
e. other specialists	A	B	C	D
f. Program Director	A	B	C	D
g. other (please specify): _____	A	B	C	D

_____

_____

6. Circle all of the following that tend to be a focus in your conversations with teachers.

A classroom work

B tutorial work

C scheduling

D individual child academic problems

E individual child social/emotional problems

F information about parents

G information from parents

H report writing

I children not participating in special programs

J other (please specify): _____

_____

_____

Many teachers differ in their exposure to what it is that specialists do or the nature of the pressures they work under. We are interested in finding out about your views on the teachers' exposure to these subjects.

	very well	reasonably well	generally	essentially not at all	some more than others
7. How well do you think the teacher understands what you do in your work with the children?	A	B	C	D	E

If you have checked the last column, please comment briefly: _____

_____

_____

8. How do you think teachers in this school find out about specialists' work? (Circle whatever applies)

A staff meetings

B conferences

C grapevine

D informal talks

E other

9. How important do you think it is for you, as a specialist, to do each of the following:

	very	moderately	not important
a. be aware of teacher aims	A	B	C
b. report freqently on child's progress	A	B	C
c. make suggestions about possible alternatives for instruction/management that work for you	A	B	C
d. work with the children in ways which are supportive of teachers' efforts and aims	A	B	C
e. make time to talk with teachers	A	B	C
f. other (please specify): _____	A	B	C

10. In terms of your experience in this school, most specialists are:

	very	moderately	sometimes	not helpful
a. helpful to children	A	B	C	D
b. helpful to teachers	A	B	C	D
c. helpful to principals	A	B	C	D

11. How do you believe each of the following affects the teachers' ability to be effective with the children who use special services?

	helps greatly	helps somewhat	hinders some	hinders greatly	no opinion
a. physical size of classroom	A	B	C	D	E
b. class size	A	B	C	D	E
c. arrangment of classroom	A	B	C	D	E
d. physical size of school building	A	B	C	D	E
e. numbers of pupils in school	A	B	C	D	E
f. numbers of staff	A	B	C	D	E

11. (cont.)

	helps greatly	helps somewhat	hinders some	hinders greatly	no opinion
g. amount of time spent on curriculum planning	A	B	C	D	E
h. reading written records and reports	A	B	C	D	E
i. test results	A	B	C	D	E
j. personal, informal contact with children	A	B	C	D	E
k. parent conferences	A	B	C	D	E
l. Core evaluations	A	B	C	D	E
consultations with:					
m. specialists	A	B	C	D	E
n. counselors	A	B	C	D	E
o. School Board Guidelines/rules	A	B	C	D	E
p. State guidelines/rules	A	B	C	D	E
q. special needs programs	A	B	C	D	E
r. ancillary programs (physical education, art, music, etc.)	A	B	C	D	E
s. children's attitudes	A	B	C	D	E
t. parent(s)' attitudes	A	B	C	D	E
u. principal's attitude	A	B	C	D	E
v. Program Director's Attitude	A	B	C	D	E
w. superintendent's attitude	A	B	C	D	E
x. assistant superintendent's attitude	A	B	C	D	E

11. (cont.)

	helps greatly	helps somewhat	hinders some	hinders greatly	no opinion
attitudes of other non-teaching personnel:					
y. (i.e. nurse, custodian, cook cafeteria)	A	B	C	D	E
z. taxicab driver	A	B	C	D	E
zz. other (please specify):_____	A	B	C	D	E

_____

_____

12. Overall, what degree of fragmentation do you personally experience in the course of an average school day?

very little	moderate	a great deal
A	B	C

Any comments?

Appendix C

Attached are Time/Activity Charts to cover a period of five school days. We expect such a record to contribute pertinent information to the body of the fragmentation study. For example: Is there a relationship between the patterns of activity and the degree of fragmentation experienced by the teacher? How much does the coming and going of the children in the classroom contribute? Is it the same for all teachers? Will we see other things that go on in the classroom that impinge on teachers' time and energy that need to be looked at?

This block of information will be objective. The information we gain from the personal monitoring of child-flow will be objective and subjective. In addition, the personal monitorings of six classrooms is a valuable source of children's reactions.

DIRECTIONS:

1. **Write children's names in left hand column.**

2. **Tell the children that there are some teachers who are interested in finding out about children's coming and going from the classroom. We would be interested to know where they go and why. (Do they go for tutoring, musical instruments, errands, basement, or what?) Read the areas listed across the page out loud to them.**

3. **Ask them to write down the time they leave, and, when they return, to write down the time they came back. If the children do not have the skills to do this, perhaps the tutors can help when they come to get them — or are there a few children able to help others?**

4. **Please note the day and date as each sheet is completed. You may find it easier to remove the staple and use thumbtacks so that the completed sheet can be stored behind the others.**

5. **An extra sheet will be put in your box on the day that the Physical Education is here (January 23, 24, 25). Even though the inclusion of gym does not represent a typical day, we would like to see what it looks like.**

6. **Would you plan to do this by the end of the week of January 15, 1979?**

7. **Please give the completed charts to your Principal.**

   Do add any comments and/or impressions that occur to you.

   Thank you.

Pupil's Name	Monday	Tuesday	Wednesday	Thursday	Friday
example: Smith, Mary	8:35-9:05-2	8:30-9:00-5	8:35-9:05-2		1:00-1:30-6
Jones, Jane	1:00-1:30-6		1:00-1:30-6	10:00-10:30-3	8:30-9:00-1
Henry, Tom	8:00-8:30-1	9:30-10:00-3		1:00-1:[illegible]-5	8:30-9:00-4

Would you please list the names of children in your class and their out-of-classroom schedules for a week's period.

Thank-You

Coding:

Learning Disability Math ----------1
Learning Disability Read ----------2
Resource Room ----------3
Speech ----------4
Music Lessons ----------5
Counseling ----------6

Total number of children per group:

Learning Disability Math
Learning Disability Read
Resource Room
Speech
Music Lessons
Counseling

57

Appendix D

QUESTIONNAIRE FOR TEACHER INTERVIEWS

1. When you use the word fragmentation what does it mean to you?
   a. How do you feel when you are fragmented?
   b. What degree do you experience?
2. What many teachers commented on was the problem it created for them when children missed class time. Is this a problem for you?
   a. If "no": How do you set things up so that missing class time is not a problem?
   b. If "yes": What are some of the things that concern you?
3. How do you handle interruptions?
4. From whom do you get support?
   (information or advice)
   (Who do you go to when you want to blow off steam?)
   (Who do you go to when you want to borrow equipment or materials?)
5. What works for you and why?
6. What's the hardest thing for you to deal with?
7. a. (for moderate to high fragmentation) Are there days or times when you feel less fragmented?
      Can you say more about that?
      What makes those times work?
   b. (for low degree of fragmentation) Are there days or times when you do feel less fragmented?
      Can you say more about that?
8. How do you decide what things to do and what to leave undone?
   a. Is there any one thing that demands more of your time and energy than anything else?
9. What kind of flexibility do you have? (in terms of what you do with children)

Appendix E

QUESTIONNAIRE FOR RESOURCE TEACHER INTERVIEWS

1. In our study we found that 50% of the Resource Room teachers experience more fragmentation than classroom teachers. Why do you think this might be so?

2. How do you define fragmentation? How does it feel?

3. From whom do you get support?

4. What sort of flexibility do you have in terms of working with your children?

5. What sort of flexibility do you have in terms of working with the things you teach?

6. What works? What doesn't?

7. What's the hardest thing for you to deal with?

8. Are there days or times or both when you feel (less) fragmented?

   Can you say more about that?

9. What do you feel is important for you to do with your children?

Appendix F

PARENT INTERVIEW QUESTIONNAIRE

1. What sort of information do parents receive about special programs?
2. From your point of view, how do you think the children feel about being in special needs programs?
   a. Is missing class time a problem for the children?
   b. For parents?
3. How do you as parents feel about having children in special needs programs?
4. How do you deal with all the reports the children get?
5. How do you undertand the
   a. Double marking system
   b. Evaluations
7. Do you have some ideas as to what might be of help to parents of children with special needs?

Appendix G

STATISTICS

All statistically significant results are listed.

A. Teachers' feelings of fragmentation in relation to other variables

Question 17 (Degree of fragmentation felt)

X Question 1 (amount of time with all children in room)
Chi square = 19.17 12df $p < .08$

X Question 2 (time with ⅓ of children)
Chi square = 21.40 9df $p. < .02$

X Question 13D (find out about specialists' work through informal conferences)
Chi square = 7.07 3df $p. < .07$

The degree of fragmentation felt was not significantly associated with differences in responses to any other of the questions.

B. Teachers' perceptions of specialists

Question 15A (Extent to which specialists are seen as helpful to children)

X Question 1 (amount of time with all children in room)
Chi square = 40.85 12df $p < .01$

X Question 2 (time with ⅓ of children)
Chi square = 41.9 9df $p < .001$

X Question 12 (how well teachers understand what specialists do)
Chi square = 48.7 12df $p < .01$

X Question 13C (find out via grapevine)
Chi square = 6.35 3df $p < .096$

X Question 13D (find out via informal talks)
Chi square = 8.31 3df $p < .04$

Question 15B (extent to which specialists are seen as helpful to teachers)

X Question 1 (time with all children in room)
Chi square = 27.14 16df $p < .04$

X Question 2 (time with ⅓ of children in room)
Chi square = 21.87 12df $p < .04$

X Question 12 (how well teachers understand what specialists do)
Chi square = 63.30 16df $p < .01$

X Question 13D (find out via informal talks)
Chi square = 10.99 4df $p < .03$

Question 15C (Specialists seen as helpful to principals) followed this same pattern.

C. Comparison of teachers' and specialists' perceptions of the different factors that may help or hinder their job performance.

(Question 16 for teachers, 11 for specialists)

Summated scales were created, as follows, and teacher and specialist responses were compared:

Environment: items a,b,c,d,e,f

Planning: item g

Testing Results: items h,i,j,k,l,m,n

Guidelines: items o,p

Special Programs: items q,r

Attitudes: items s,t,u,w,x,y,z

Of all of these, only the comparison involving the attitudes was significant ($p < .01$). The direction of differences indicated that all these people's attitudes were seen as more helpful by teachers than by specialists.

There were no other statistically significant differences between teachers' and specialists' answers to comparable questions.

D. Principals were asked their perceptions of how fragmented their teachers were, and their responses were compared to teachers' self-ratings. The following table indicates the results.

Table VI

Comparison of Teachers' Self-ratings of Degree of Fragmentation with Principals' Ratings of the Teachers

	Teachers' Self-ratings		
Principal's Perception	**Little**	**Moderate**	**Very Fragmented**
Little	11	11	7
Moderate	0	10	2
Very Fragmented	0	3	2

That is, 23 teachers responses were congruent with principal perception. (This is a statistically significant relationship between the variables, with Chi square = 10.58, 4df, $p < .05$). Nonetheless, 20 teachers felt more fragmented than they were perceived to be by their principals, and only 3 teachers felt less fragmented, indicating a significant tendency to underrate teacher feelings of fragmentation in cases where it is not accurately judged.

Appendix H

THE RESOURCE ROOM

Because the Resource Room had not originally been planned as a study focus, we have included these findings and recommendations in the appendix. It did seem important to explore further the unanticipated cache of information relative to the Resource Room which emerged in the data analysis. The reader is invited to speculate with the investigators about these findings and the import of some of their implications.

As has been indicated previously, 55% of the resource room teachers responding to the questionnaire indicated that they felt a "great deal" of fragmentation. In the follow-up interviews an attempt was made to understand why so many more resource room teachers felt a "great deal" of fragmentation as compared to classroom teachers (19.8%) and more particularly, to other other specialists (16%).

In Malden, a Resource Room is defined as the home base classroom for children who are emotionally disturbed, mentally retarded or severely learning disabled. In contrast, it is the function of the Learning Center in Malden to provide support services to children with special needs who are being mainstreamed in regular classrooms.

The individual children assigned to Resource Rooms leave their home base for mainstreaming activities (e.g. music, art and physical education) and other special support services (e.g. occupational education and speech). The fact that the Resource Room is viewed as a home base by both teachers and children means that the resource room teacher, like the classroom teacher, feels responsible for each child's overall educational program. In this respect, they differ from other support personnel, whose responsibility for a particular child is more limited.

There seemed to be four other areas in which the experience and situation of the resource room teachers differed from those of the other specialists, in ways that might be related to their special feelings of fragmentation. These involved the comings and goings of children, concerns about scheduling, feelings of isolation and disconnectedness among resource room teachers, and administrative policies supporting the Resource Room.

"Comings and Goings"

The comings and goings of children assigned to a Resource Room seem to offer particular difficulty. Both classroom and resource room teachers have reported that these children urgently require both consistency and a clear, predictable structure. The following comment by a resource room teacher emphasizes this:

> ". . . children are assigned to the Resource Room because of their specific needs. One of these is that they require structure . . . From my perspective they are unable to take a great deal of change."

It seemed to one resource room teacher that in a half hour of "speech therapy" half of the time is lost. Ten minutes are used for "coming and going" to the therapy room and five minutes are required to orient the child and provide the structure for the session. There is a time period of only fifteen minutes left for actual speech therapy activities. The scheduling of longer time spans for activities such as speech and occupational education might be one alternative way of structuring programs.

This all points to a special need for professional personnel to address the question of how programmatic continuity and consistency for children assigned to the Resource Room can be achieved.

Concerns About Scheduling

The interviews indicated that resource room teachers feel the same stresses due to the children's mobility as do classroom teachers. However, since there are fewer resource room teachers in a given school building, the ten-

dency is to arrange schedules and assign shared spaces in accordance with the needs of the majority (the classroom teachers).

However, the needs of children in a Resource Room do not always coincide with those of children assigned to regular classrooms. The coordination of programs, schedules and spaces must take account of these differences, whether or not the teachers involved are fewer in number.

A second area of concerns about scheduling involves the timing of plans. One teacher stated:

> "When the schedules are made the first of the year they're made much too soon. I do not know the children. You really need to know the children first, before you make up a schedule."

This kind of comment is particularly poignant as it relates to children assigned to a Resource Room. The program planning for these children is closely related to in-depth diagnosis and educational prescription. Within the present context of time schedules and personnel assignments, the program planning task must be accomplished early in September. Reassessments of children's growth are also made in the fall. If this takes extended time, as it often does, the schedules have already been made and personnel have been assigned well before the reassessments of children's current status and needs are completed. We suspect that new ways of supporting the Resource Room structure and the efforts of Resource Room personnel will need to be developed if the valid goals for which that system has been designed are not to remain unattainable.

Feelings of Isolation and Disconnectedness Among Resource Room Teachers

Another factor which contributes to the resource room teachers' feeling of lack of support is that they do not seem to have easy access to the informal school communication system. This factor engenders in them a sense of isolation from the rest of the school. This process was described by one resource room teacher when she was asked how she defined fragmentation.

> "It is a separation from the rest of the school, a feeling of disconnectedness with no communication . . ."

Unlike classroom teachers, the resource room teachers do not have a large natural support group of peers in a similar role. We suspect that this is involved in their feelings of isolation.

It thus would seem useful to make special efforts to provide this group with opportunities to connect with the rest of the school's staff. For example, the principal of the school might provide opportunities for resource room teachers to participate on committees and in faculty meetings so that some of the issues and concerns with which they are faced could be shared. In this way an awareness could be developed among a larger group of teachers who might work toward providing, on a reciprocal basis, some of the supports sought by both the resource room and classroom teachers.

Administrative Policies Supporting the Resource Room

The principal of the school is responsible by law for the safety and welfare of all the children assigned to his setting. Personnel, schedules, room assignments, programs and activities are all part of this overall responsibility. The resource room teacher is responsible to both the principal and to the Director of Special Education. Responsibility to two different authorities obviously evokes distinct possibilities for feelings of fragmentation. Unless the channels of communication are clear, misinterpretations can easily occur under these circumstances. It is also possible that the resource room teacher may "fall between the cracks" and be ignored or overlooked by both the school principal and the Director of Special Education. One resource room teacher said,

> "There is a lack of connectedness . . . There needs to be an awareness by someone of what is going on."

Responsiblity toward two authorities may in part account for the feelings of resource room teachers that the usual support systems in schools do not seem to be readily available to them. Among those resource room teachers who expressed the feeling of being very fragmented there were two kinds of responses. Either the teachers attempted to solve their problems on their own or they utilized their supportive relationships with friends or family. This finding contrasts with the finding that other resource room teachers and regular classroom teachers who experienced less fragmentation were able to reach out for support both within and outside the school. While those teachers who feel very fragmented need to find ways, themselves, to initiate more outreach, the administrators can also facilitate the development of support systems for them.

For example, one resource room teacher recalled that in the past systemwide meetings had been held once a month. However, her current perception is that the system has grown too large to have these meetings. In actuality, the structure could be designed to encourage regularly scheduled meetings of resource room teachers in which they would work on some of the problems unique to their roles and help to provide necessary supports for each other.

Some Other Administrative Points

In part, the continuity of program and the development of feelings of fragmentation may relate to the policies governing the employment of resource aides. It was stated by one teacher that when the aide can be assigned to the Resource Room for the whole year, rather than for only a four month period, the likelihood of fragmentation decreases. Longer term classroom assignments permit both children and teachers to feel greater programmatic continuity.

Another administrative dimension is the training of personnel. The principal and other staff assigned to work with resource room children and teachers require a background of understanding and training in the field of special education. If this background knowledge has not already been acquired, the school principal and/or the director of special education should arrange for regularly scheduled training sessions. These sessions should be designed to enhance the knowledge base of personnel so that they understand the issues, problems and possible solutions with which the resource room teacher is concerned.

Again, let us reiterate that the findings referred to in this section of the Appendix do not fall directly under the original focus of this study. Nor is there strong data support for these possibilities. They are suggestive, not conclusive. However, the issues raised by the interviews with resource room teachers seem compelling enough to invite our speculation on their meaning.